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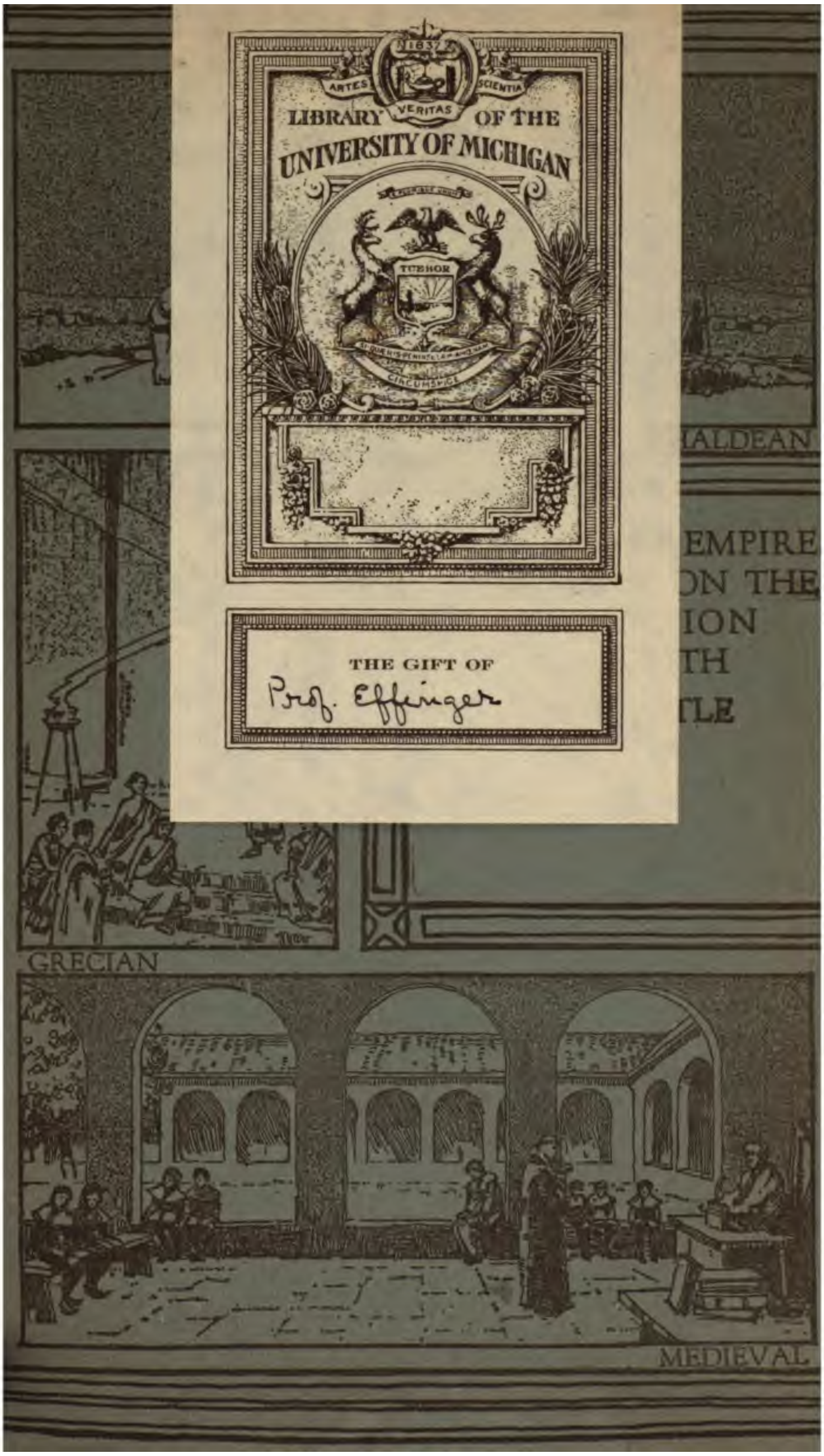

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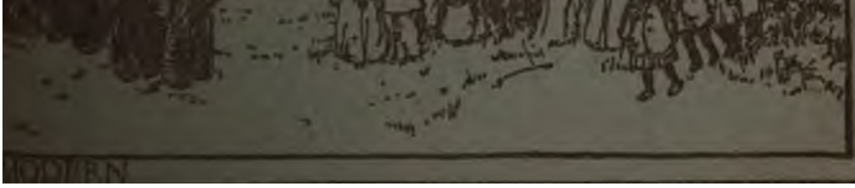

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PUBLIC SCHOOL METHODS

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TEACHERS' GUIDE
INDEX

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Kindergarten; Primary Reading; Plans; Primary Language; Plans; Story-Telling, Dramatization, Games, Songs; Construction Work.

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Prof Effinger.
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10-17-1924.

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CHAPTER ONE

Archibald S. Bennett
Manager Bennett Publishing Company

INTRODUCTION

The ancient tradition that occupations and trades should be hereditary, descending like other family traits from father to son, receives scant respect in a free Democracy. The modern theory is that anybody may do what he likes, if he can, and that society should ever help him to realize his highest ideal. The facts are that hardly any man in the United States is doing at forty what he had in mind to do at fourteen, and that an increasing number of women are in occupations that did not exist even in fancy when they were girls. Under the circumstances the sanest vocational guidance is that which Mr. Bennett describes — a sort of progressive, immediate guidance, based on the philosophy of a supreme Master; "Sufficient unto *the day* is the evil thereof," and "Now, is the accepted time; behold *now* is the day of salvation." —Henry Turner Bailey.

1. Necessity for Vocational Guidance. The subject of vocational guidance is one of growing importance. Many pamphlets and books have been written concerning it. Nearly every educational convention has a place on the program for a discussion of it. Wide-awake teachers wish to know just what they may hope to do in this new work. This chapter deals with this subject from a new view-point. It is written for teachers who find themselves in a community too small or too conservative to develop a full-fledged vocational guidance bureau or department.

Much can be said in favor of vocational guidance, for it has many good features, but at the same time it remains to be seen just how much real substantial benefit can be had from this early selection and training for special work.

2. The Vocational Guide. A common interpretation of the term *Vocational Guide* or *Vocational Counselor* is one who helps children and young people to determine their life work and attempts to counsel them regarding the preparation necessary for the chosen career. Few teachers dare undertake the highly specialized task of acting as an expert vocational counselor. We cannot all tell what each child will eventually do to earn a living, or to win fame, but each of us can help steer our pupils through the difficulties of their daily work. This is the real ever-present problem.

We generally consider the vocational guide as one who assists boys and girls and young people to fix upon a suitable life-work and to guide the pupil in his preparation for that particular career. We prefer in this chapter to consider the vocational guide as one who assists the boys and girls to solve their present-day problems with a view to the influence of these solutions upon their future careers. Few people in later life find themselves following the career which seemed best for them when children or young people. It is therefore a mistake to try to determine in advance what career a boy or girl shall follow.

The child has his immediate problems to face, difficulties to surmount, courses to choose. It would seem more essential that teachers, as guides, should know very clearly what difficulties are before the child in his present needs and during his next few weeks or months, than to bother about what his ultimate career is to be. Such a plan will enable the teacher to act as counselor at the moment when the child especially needs a guide.

3. Influence of Specialization. The specialization of [illegible]-

tries in the larger centers leads children to drop into one or another of these industries and become cogs in the great machinery. Most of the unskilled-grade labor in factories, stores, offices and so forth, is city bred. On the other hand, we are all aware of the fact that in nearly every line of industry the leading men are frequently those who have been brought up in small country places or on the farm. In the country, where one sees the handling of the raw material of a great many different kinds of industries, one is more apt to have a broad knowledge of what goes to make up the essentials of life, and with this broader vision to be able to handle larger problems, and thus develop into a leader in some one of the various industries. A teacher in a small community, therefore, may well imagine that the youngsters in her charge are the future leaders in various lines of industry. For her to act in the capacity of guide for these young people is fully as important as to attempt vocational guidance in the larger cities.

4. Promptness Necessary. The keynote of the plan out-lined here is to act as guide always at critical times. *Timeliness* means everything. How to recognize these critical times is half the battle. At the moment when a child must make some more or less important decision comes the teacher's opportunity, and the teacher should ever be alert to sieze upon it. From these seemingly insignificant decisions early in life come the unfortunate missteps or the happy combinations of later years.

It is quite impossible to mention any large part of the important decisions which will come under the teacher's supervision. No classification can be made that will answer all purposes, but it will help greatly if the teacher keep constantly in mind the idea that the immediate problem before each pupil is *the business of going to school.*

5. Leaving School. As we advance from the fifth to the eighth grade the number of pupils constantly diminishes, and less than half of those who finish the work in the eighth grade go to high school. The problem of diminished attendance in these grades is one of the gravest now confronting not only the rural and grade teachers but the superintendents of great states and cities as well. Its evil effects upon our national life have already become so apparent that measures are being taken throughout the country to induce more of these pupils to remain in school until they have finished, at least, the work of the grammar grades. Practically all states have compulsory education laws which require children under fourteen years of age to remain in school until they have completed the work of the eight grades; but in some states these laws are not enforced and many children are kept from school to work in factories or for other reasons.

Those who have made a study of this problem find the following to be the chief causes for children leaving school before completing the work of the grammar grades:

(a) OCCASIONAL ABSENCES. In every district there are families who do not realize the importance to their children of regular attendance upon school, consequently they let them remain at home on the slightest pretext. Mary is needed to tend the baby; John's father wants him to go to the neighbor's and borrow a wrench; Susan got her feet wet yesterday and has a slight cold, or Henry wants to go fishing. Any or all of these excuses seem valid to such parents, and the children, because of their frequent absences, soon fall behind in their classes and lose interest in their work. The complaints of the children because they have fallen behind lead the parents to think that school doesn't amount to much, and they consent to the children's request to drop out altogether.

What can the teacher do? We have already referred to the importance of timeliness.

(1) Every case of absence and tardiness should be satisfactorily accounted for. As far as possible require written excuses, signed by the parent, for absences. If this requirement is clearly understood at the beginning of the term it will act as a check on unnecessary absences.

(2) Make it a point to visit the homes of those pupils whose attendance is irregular, and go over the matter in the most friendly spirit with the parents and pupil. In so doing you will usually lead them to see the necessity of the child's attend-

ing school regularly. If these measures do not bring about the desired result it is sometimes better to call upon the authorities to enforce the compulsory attendance law than to allow the child to remain out of school and grow up in ignorance, a menace to society.

(3) Remember that just as other undesirable habits are formed step by step, so do these occasional absences form the first links in the chain of events which is likely to take the pupil out of school long before he should leave. Use your best efforts to check this tendency when it begins.

(b) DESIRE FOR FREEDOM. There is implanted in the heart of every normal boy and girl a desire to live close to nature, to roam over field and forest, to gather the wild flowers, listen to the sweet songs of birds and with bared head look up into the depths of the ethereal blue and drink to the fill of God's fresh air. Woe be to the teacher or parent who would suppress this desire. It is one of the greatest gifts that we inherit from an all-wise Creator. But this desire now and then is so strong that it takes the boy or girl from school. To such a one the walls of the schoolroom seem like prison bars, and the routine of the daily program is exceedingly irksome. Boys in whom this love for nature is strongly developed are likely to play truant, and if allowed to follow their desires they leave school at an early age.

Every teacher of the intermediate and grammar grades has been confronted with this problem. We admit that its solution is not easy, but in dealing with it there are some things that may be done and others that should be strenuously avoided.

(1) The teacher who is herself a lover of nature and is constantly pointing out to her pupils the beauty and grandeur in the objects about them and showing the bearing these objects and laws have upon the daily work of the school, will seldom be annoyed by cases of truancy. The nature lovers among her pupils will soon learn that they can glean more satisfaction by studying under the teacher's guidance than by roaming the fields and woods without a definite purpose.

(2) Make use of the special knowledge which pupils

of this tendency have, in your nature study lessons. They can secure and prepare the specimens and often can give information that no one else has. Lead them to feel that this talent binds them to the school in a peculiar way.

(3) Encourage such pupils to take a far look ahead. The great naturalists — Agazzi, Darwin, Cuvier, Linneus, Asa Gray and many others — were once boys like themselves; but these men gained distinction because they remained in school.

(4) Do not employ harsh measures with these pupils. A boy who possesses a real love for nature is not a bad boy — he is usually sensitive and he may be timid. If you are to hold him in school you must win his confidence.

(c) DESIRE TO EARN MONEY. This excuse for quitting school is given much more frequently than any other. Whenever a case of this sort arises the teacher should investigate thoroughly. This investigation will probably show that one of the following causes led to the decision:

(1) A short-sighted ambition to possess money of his own, earned by himself, influenced the boy to place the value of these temporary earnings above that of an education that would greatly increase his earning capacity in the future. Thousands of boys and many girls are lured from school by following this false ideal.

(2) Greed of parents who place the earnings of the child above his future welfare.

(3) Family conditions which may make it necessary for the child to become a wage earner. These cases are usually temporary, and the child should be encouraged to return to school as soon as possible.

Many a teacher has been puzzled with the problem of pupils leaving school to earn money. When the case arises, parents and pupil should be interviewed and the case should be thoroughly discussed. Show the parents that in this age only educated labor is remunerative. We do not mean by this that work with the hands is not remunerative, but that the workman must have received an education and training that will enable him to ply his vocation with intelligence and skill.

It is only in rare instances that the untrained man or woman attains to a remunerative position in the business world, and the chief reason for this is that they have to compete with educated people. Doubtless you will be able to cite to both pupil and parents cases well known to them that prove this statement.

Caution. In these discussions the teacher should avoid saying anything that may cast reflection upon manual labor or the dignity of the laborer. Her duty consists in influencing the pupil to use the opportunity for schooling in such a manner as will enable him to make the most of himself in the future.

(d) EDUCATIONAL MISFITS. Many children in their teens feel that there is no connection between the work of the school and the affairs of the home, and especially the great business world. These children feel that they are wasting time, and we must admit that in too many instances there is some ground for their dissatisfaction.

Again, some children have natural aptitudes for certain subjects — as music and art — and they desire to spend most of their time on these. At this age they are unable to look far enough into the future to see that a good general education is necessary to their success in the vocation they wish to follow.

Sometimes the teacher is much more interested in some subjects than in others and presents these subjects in a more attractive manner than the others. Pupils who have little taste for these subjects feel that they are neglected and lose interest in their work.

This source of dissatisfaction is perhaps more easily overcome than any of the others that we have discussed, because the remedy lies almost entirely with the teacher.

(1) In rural districts much will be gained if the environments in the school buildings and grounds are made to resemble more nearly the indoor and outdoor environments of the home and farm in real life. The younger children especially will profit from this plan. The more nearly the two environments — school and home — resemble each other the more real and vital will become the chain of choices made by the students.

Take various examples. First: Have one corner of your school resemble the pantry or cupboard with a stand for the water pail and wash bowl and towels, etc. Have shelves for the lunch baskets. The children can each bring a drinking cup and can be taught how to initial it. Keep these individual drinking cups on the cupboard shelves. Instead of allowing the children to eat their lunches in any old place and throw crumbs and refuse about, show how much fun it is to have two parties — one for the children over ten and one for those under ten — or let each child eat at his own desk, having first procured or been supplied with a rectangular piece of oil cloth with which to cover the top of the desk.

The wash stand might have two little wash bowls — one for the younger folks, or perhaps one for boys and one for the girls. Sweet smelling soap and clean towels will make fun of this part of the day's work. In another corner of the room have a collection of books with one or two easy chairs near by.

Here is an opportunity to impress upon the pupils the importance of cleanliness. The drinking cups, wash bowls and any other utensils in daily use should be washed and sterilized in boiling water once a week, and this work should devolve upon the older pupils, both boys and girls having a share in it. These are some of the things to be enjoyed in common by all the pupils. Beside this make it a point to allow and insist that each pupil have full possession of his desk and chair. Make him responsible at all times for its neatness and general appearance.

Suggestions similar to these can be enlarged upon to make the interior of the room more like the living room at home.

(2) Outside of the schoolroom the shed, if you have one, may be considered first. Provide it with some kind of a work bench and procure a few simple tools useful in carrying out the suggestions in the chapter on *Handcraft*, Vol. V. Have an orderly arrangement for the tools and a systematic method of handling them. Perhaps one of the older boys may be appointed to look out for them and to help instruct those who may be permitted to use them. Have all the wood and

kindling piled away in an orderly fashion. The shed will help take care of the boys on rainy days.

(3) Out in the yard or grounds, always plan to have, at least in the summer, something growing which needs attention, as flowers, young trees, shrubbery, possibly some experimental corn, beans, potatoes, grain or garden stuff—not too much but just enough to excite and hold the interest. In other ways which suggest themselves to you do everything you can to make the outdoor life at school resemble that of the farm and home. Now then, with the children playing, studying, lunching, reading and working in this environment, you must be ever on the alert to help them choose aright. The more real you can make it all seem to the pupils the more real and vital will become the counsel and advice which you give them.

(4) Remember that at home no one ever asks a boy to go out and plow in the pasture just to learn how to plow, for there never is any useless plowing. When he plows his first furrow it counts with his father's work.

The beginner never feeds the stock at odd times just to learn how to feed them. His care is always called for when it is needed. Every bit of work which the farmer's boy does is real and essential. If he can be led to see the realness of his work in school the rest is easy. So it is with the girls. No one asks them to sweep or make beds or set tables or take care of the baby just for practice or to learn how. The things they do are always helpful and useful.

The vital push of necessity is back of it all. In school this can be brought about by increasing the number of things which seem to be a part of the necessary and real program of life.

(5) If after careful work the teacher fails to find a way for the pupil to remain in school, then she should be able to show how he can secure a fairly good education outside the walls of the schoolroom. Night schools and extension courses should be brought to his attention. These remarks, of course, apply to students of any age who are obliged to drop school

work. Do not be discouraged if you fail to win your point. On the contrary, if you win and the pupil decides to remain in school, then special attention should be given to see that with this new attempt at the business of education he gets just returns.

(6) These suggestions have helped to provide the surroundings in which a more careful study can be made of the fundamental likes and dislikes of the child as they become apparent.

Children under ten should be led to acquire habits of neatness, orderliness and thrift, and inspired to be cheerful and happy in their work.

The same is true, of course, of older children, but a more free reign can be given the older ones, followed up by corrective counsel.

At the end of a year or two a teacher who is alive to all of these methods of studying children will begin to detect the underlying desires and ambitions of her pupils. She will observe many of their weaknesses and strengths; with care and skilful piloting she may succeed in leading many of them to think twice before making any choice, and thus by a chain of right choices reach at last a suitable life work.

6. Choosing Studies. There is little to be done in the matter of choosing studies for the lower grades. Most of the work of the younger pupils is carefully planned, and little or none of it can be omitted profitably. In most schools such omission is not permitted, so that no decisions on these questions arise in the lower grades.

However, there are always opportunities to help pupils in coming to a proper decision on certain kinds of studies which they may take up outside of school, or some of the special branches which they take up in school. For instance, music. Whenever a teacher learns that a child is studying music at home, or trying to make up his own mind regarding whether or not he should study music, then arises the opportunity for the teacher to act as guide. The field of music is a broad one, both instrumental and vocal, and the manner of teaching it is important. The amount of work which a young person should do on music is also a question for careful decision. This applies to music as taught in the schools as well as by private teachers.

Cases of this sort must be settled on the individual's conditions. If, for instance, the pupil has pronounced musical talent, he should be given every encouragement to cultivate that talent, but this should not be done to the neglect of his common school branches, for a working knowledge of these is necessary to his success, let him follow whatever vocation or profession he may.

Another good example is found in the drawing and art and craft work. The pupil may wish to drop drawing work altogether, or he may wish to take up more than the work required. In either case, the teacher should not act without cause or without investigation. Each subject requires different treatment, but with drawing one can explain how it develops the power of observation, and gives a new means of expression. Occasionally a pupil desires to spend a great amount of time on some particular work, as embroidery. This may or may not be a good plan. In such a case all concerned should be brought to realize just what it means.

Careful observation of the pupils under your charge will lead you to discover that nearly all pupils have some special subjects which they like better than others, and most pupils have one or two subjects which they do not like at all. Here again is an opportunity to discuss these matters thoroughly, and if possible, correct distorted ideas regarding these branches.

In a number of cases it may develop that the reason the pupils like subject *A* better than any other subject is because the teacher herself likes *A* better than she does some other subject. If this is the case, the teacher should begin early to correct her own views on that subject.

7. Other Problems. Other classes of problems are always arising, as, for example, the problem of work and play. It is always well to study your pupils to learn whether the time which they spend between play and work is well balanced.

Any habits which you see them indulging in which are detrimental to their health offer an opportunity for you to act as guide. Such occasions as these will come into every pupil's work and will constantly be before every teacher. This gives one an opportunity to do work in the capacity of a guide nearly every day of the school year. Strong emphasis must be laid on the value of timeliness. One should bear in mind that all of this work should be done at the moment of decision, and not in a dogmatic fashion when pupils are interested in something else.

8. Problems of the Eighth Grade. The question of going to high school and of going to work upon leaving the eighth grade, is one of the most important that the boys and girls have to answer. The teacher should be able to assist each of her pupils to make a wise choice. When they enter the eighth grade some pupils expect to go to high school, some are fully persuaded that they will not go and some are in doubt. The eighth grade teacher who ascertains at the beginning of the year to which of these classes each of her pupils belongs can do much in the months that follow to induce those who are undecided, to go to high school, and she may persuade some who were intending to go to work to change their minds and enter high school. This should be done as far as possible.

Family conditions in some cases may be such that the boy or girl is under the necessity of going to work. In such cases the teacher can do much towards helping the pupil prepare for whatever occupation he expects to enter upon by emphasizing the subjects and phases of subjects in the course of study which will be especially helpful, and by directing him in reading along the lines of his chosen vocation. Teachers of this grade should also give frequent talks to pupils on opportunities for education outside of school and show how these supplement the work of the classroom. Before they leave the eighth grade pupils should have developed a taste for good reading and know how to look up for themselves any information they desire to obtain from books.

Teachers of ungraded schools, in which there are boys and girls in their teens, are confronted with similar problems, and they should be a guide to these young people. In rural districts the boys may not look forward to further schooling, and too often the parents do not see the need of it. The teacher of such a school should write the United States Department of Agriculture, Washington, D. C., for bulletins upon agricultural education. She can do much to inspire these young people to continue their education by organizing corn and canning clubs, and by showing the demand for young men and women with scientific training in agriculture.

Opportunities open to young women in rural communities were never better, and the teacher should become familiar with them so that she may be a valuable counselor to her girls.

Each boy and girl who decides to go to work should therefore be given special guidance at this critical time — a time that is full of serious decisions. No matter how small the community, there will be matters of unusual importance to decide. Even should the youngster take up the occupation of his own father, there remains the opportunity to show him the bright side of his chance and to point out the things to be avoided. In rural districts these beginners should be shown the great possibilities of intelligent farming. Many a lad has become a power in his community by taking advantage of the extension courses offered by state universities and agricultural colleges.

In advising these young people concerning the avenues of livelihood and advancement open to them, one should coöperate with parents and others who are interested. It would be well to begin making a file of information gained by these conferences and strive to add to it each term. This would impress children and parents with the means at hand to give really helpful advice. The U. S. Government will supply upon request a list of various publications touching upon agriculture, horticulture, technical trades, trade occupations, education, etc., from which a selection of booklets and pamphlets may be made suitable for a local bureau of information.

In the case of children who decide to remain in school and take the high school course, the guide's problem is somewhat simplified, but is equally as important. First, all who plan to attend high school should be given a brief explanation of the nature, purpose and value of the work offered, and by simple, graphic illustration the value of the work as a whole and of each course as a part should be explained. In the latter part of the year emphasize the difference between the work of the high school and that of the grammar school, and show the valuable training that the high school gives.

In everything we are more or less dependent. In grammar school we study the geography of a country as we find it without looking very far into the causes. For these we depend on others. In elementary history we do not trace very far the sources from which peoples have come. In arithmetic we count, add, multiply, divide, etc., without looking behind the operations for their reasons. In the study of language we parse and remodel, regardless of derivations. For all these and similar branches we are dependent.

If we go through life dependent on others for the larger part of our equipment we shall never break away from the less remunerative and less satisfactory phases of existence.

If in any business, occupation or profession we are to succeed in a large or even moderately large way, we must know much more about the causes and sources of things.

Deeper study makes us more and more independent and resourceful. The high school courses help to give us this additional power and in this way fit for larger life. Particular attention should be called to individuals in the community or elsewhere who are good examples of the advantages of such equipment.

In this connection it will be well to point out that frequently men who have never taken high school courses succeed in educating themselves through extensive reading and varied experiences, and thus are able to achieve as much as high school graduates,— but this generally requires more effort and perseverance than is demanded in school. At the same time high school graduates sometimes fail to make the most of their opportunities and thus discredit the value of a better education. Point out that this does not lessen the chance of the energetic boy or girl, but on the contrary gives less competition and therefore a better chance.

An interesting prelude to a discussion of this character can be secured by asking each pupil to write a few paragraphs on "What I think I shall gain by going to high school."

Do not hesitate to discuss these matters freely and frequently with the pupils. Much can be gained all around by such discussion.

In particular, each of the various courses of the school should be fully explained. The required studies of the first year in high school do not differ much, yet even a slight variation of channels will eventually lead to widely different goals, and no pupil should be allowed to choose his course or to switch from one course to another without a clear understanding of the nature and the outcome of his action.

Teachers should make a study of the opportunities of the community and thus be in a position to do some really helpful local guidance. As before the parents and friends must be consulted and interested. Every effort should be made to prevent the pupils from feeling that they leave school helpless and uninformed as to the course ahead of them. Each pupil should know the why and wherefor of every bit of work done and be able to connect it with self-development and with the development of the chosen life work.

9. Conclusion. It is almost needless to say that the whole purpose of this chapter is to show how, by taking heed, the teacher can give the pupil (and his parents) the feeling that he is not sliding aimlessly along through a more or less harmless and practically useless series of exercises and studies which are supposed to be vaguely helpful; but, on the contrary, that he is at all times acting under the direction and guidance of a guide who knows the difficulties to be encountered, and strives always to enlighten all interested parties.

Now that the whole plan is before us, it is evident that more beneficial work can be done by assuming that the vocation of the youth is to make a business of getting an education, rather than by assuming that anyone's business is to predetermine his final vocation.

Nearly every phase of this work can be strengthened and made to have an accumulative value, both for the school and for the teacher, by keeping card files and records. Each pupil should have a "special history card" that gives in a condensed form the main point of these various moves. This card can be kept as a school record and copies can be made if a pupil transfers or leaves. Matters of this sort are fruitful topics of discussion at teachers' meetings and institutes.

THE GARY SYSTEM

One of the most complete plans for vocational guidance and training in the United States is that connected with the public schools of Gary, Indiana. This city was built by the United States Steel Corporation and is the site of one of its largest plants. Before the steel mills were erected the site of the city was a barren sand waste. Within a decade this barren tract of land had become a city of 40,000 inhabitants. Other manufactories located in the city and the population soon included a number of nationalities. When the public schools were organized there were no deep-seated local prejudices to be overcome, and the Board of Education found in Mr. William Wirt, a man who believed that radical changes should be made in the traditional school systems of American cities. Mr. Wirt was given opportunity to put his ideas into practice, and the result is a system of schools in which the study of academic subjects, vocational training and directed play occupy about equal portions of the pupils' time during eight hours of each school day. This plan is known as the *Gary System*.

In brief the system consists in organizing two schools in one. Eight rooms are considered a unit for such division. Under the old arrangement these rooms would accommodate 320 pupils, forty to a room. Under the Gary plan they accommodate twice that number.

The first division comes at 8 A. M. and has one hour of ordinary school work before the second division arrives at 9. The first division then goes to the shops and the playground for an hour. At 10 the second division goes to the shops and the playground, and the first division returns for another hour's study and recitation in the ordinary school subjects. This plan is followed through the day, which closes at 4 P. M.

Departmental work is done in all grades above the kindergarten, and pupils begin vocational work in the fourth grade. Instruction in shop work is given by experienced workmen, instead of manual training teachers. The greatest freedom is allowed pupils in choosing their industrial work, the idea being that if a pupil chooses to go into the carpenter shop he does it because he thinks he would like to become a carpenter. Over fourteen trades are taught in these schools, and among them the boys and girls are pretty sure to find suitable vocations.

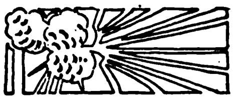
The Gary System makes more complete use of the school buildings than any other, since it conducts evening schools for adults in all the trades and in the common branches, and the buildings are open Saturdays and the auditoriums on Sundays. The advocates of the system claim that it holds a larger percentage of pupils in school until they have completed the high school course and that it sends its pupils out better prepared for active life than do the other systems.

The system has been introduced into some of the schools of New York City. Consult Bulletin No. 23, Public Education Association of the City of New York.

Considering our present industrial conditions, out of which the demand for vocational education has arisen, it would seem that the Gary System points the way to the solution of the problem of enabling the schools to give boys and girls the necessary knowledge of the branches in the ordinary courses of study, and at the same time to give them a vocational training which will enable them to be self-supporting when they leave school. The Gary System makes a more complete use of the school plant than any other system. It enables the pupils who desire to do so to spend more hours during the week in direct school work, and it holds a larger proportion of pupils in school until they complete a course of study than the old system. With such minor modifications as may be necessary to meet local conditions this system might be successfully introduced into many cities.

CHAPTER TWO

THE DICTIONARY AND HOW TO USE IT



1. **Introduction** The habit of the intelligent use of reference books is the distinctive mark of the educated man. Without this habit our stock of ideas is from year to year augmented only by the accretions forced upon us by the objective facts of life. Experience may in some respects be the best teacher, but it is an intolerably slow one. With the reference book habit the world of science and letters is at the disposal of the intelligent mind. The teachings of experience are solidified, coördinated, expedited, and often anticipated. With the reference book habit, each day makes its contribution to our intellectual progress; each year's attainment surpasses that of the preceding year; our education is continuous.

2. **Alphabetization.** Before a child can use any dictionary with facility he must know the alphabet. This does not imply merely the ability to begin at A and recite through to Z. Almost every child who is of the age to begin dictionary work can do that, and any child who cannot, can be taught to in a few minutes. To know the alphabet implies rather such a feeling for the position of the letters that the child will know without the necessity of repeating the letters in order, that, for example, "p" comes before "t," that "d" is in the first part of the alphabet, or that "n" is near the middle. A child should, in other words, know the alphabet as he knows the days of the week or the months of the year. It will be found that not many children have any such familiarity with it, nor is it necessary

that they should have before beginning dictionary work. At the start it is sufficient to be able to repeat the alphabet. If any child is unable to do even this a few repetitions in unison by the class of the old mnemonic arrangement

a, b, c, d, e, f, g,
h, i, j, k, l, m, n, o, p,
q, r, s, and t, u, v,
w, and x, y, z,

will in general be all that is necessary, for the old singsong is very easily remembered. After the dictionary work has commenced it will be found helpful to have in plain sight a copy of the alphabet all on one line, in letters two to four inches high. These can be either printed in chalk upon the blackboard, if there is one long enough, or cut out from display advertisements in newspapers and pasted upon a long strip of paper. The essential thing is that the letters shall be distinctly legible to every child in the room.

(a) LESSONS. (1) Once the ability of every child to recite the alphabet is assured, the teacher should give out a series of letters, such as *p, s, b, k, v, a, o, r, n, f, r, e, t,* to be arranged in alphabetical order. When this is mastered, give a list of common words, each beginning with a different letter, to be arranged alphabetically. This should be followed by a list of words beginning with the same letter but having different second letters. *Pray, pleat, police, pygmy, pneumatic, peace, phantom, punish,* might form such a list. Follow this with a list in which the first two letters are alike, as *cob, coral, comfort, coin, cottage, cod, cosy, coffee.* A list of words having three letters the same, as *subtle, subordinate, subaltern, suburban, subject, subside, subcellar, submit,* can next be given. The best way to handle these lists is to write each word on a separate card or small square of paper. By this means the words can be arranged in the desired order without rewriting them.

(2) The alphabetization of these lists will bring the class to the point where they are ready for a general definition, which may be phrased as follows: The relative

position of two words is determined by the first letter in which they differ. This abstract statement of the principle may be made graphic by a few illustrations. Take the two words *precipice* and *precipitate*. Write them one under the other and separate by a line the part that is alike.

$$\begin{array}{l|l}\text{precipi}&\text{ce}\\ \text{precipi}&\text{tate.}\end{array}$$

Precipice precedes *precipitate* because "c" comes before "t."

(3) With the principles of alphabetization understood, the class is ready for the use of an actual dictionary. Every child should, of course, have a small dictionary for his own personal use. This is such a pedagogical truism that argument is superfluous. Let the class first find the part of the dictionary containing the words which begin with *a*. Nearly every child will know at once that the a's must be at the front of the book. Then have the class turn to the z's, and after that jump around, finding the m's, k's, p's, d's, w's, and so forth. This will be done with considerable facility, for the work up to this point will have given most of the pupils a real feeling for the relative position of the letters in the alphabet.

Specific reference from this time on will be to Webster's Elementary School Dictionary, the book that in most cases is the one selected for beginners in dictionary work.

(4) Have the class open their dictionaries at, say, page 124. In the upper margin will be seen, at the left, the word *conqueror*, at the right, the word *consistency*. Ask why these particular words are put there. One or more of the pupils will speedily discover that *conqueror* is the first, and *consistency* the last, word that is defined upon this page. Any word, then, that is alphabetically after *conqueror* and before *consistency* will be found upon this page. Will *constitution* be found here? It is after *conqueror* $\left\{\begin{array}{l|l}\text{con}&\text{queror}\\ \text{con}&\text{stitution}\end{array}\right\}$ because "s" follows "q," but it is also after, and not before, *consistency* $\left\{\begin{array}{l|l}\text{cons}&\text{istency}\\ \text{cons}&\text{titution}\end{array}\right\}$ as "t" follows

"i." Therefore *constitution* is not upon this, but upon a following page. The word *c nsider*, by a similar process, is found to be upon page 124. The class can now be given a short list of words and told to determine the number of the page upon which each one occurs, without stopping to hunt out the actual word. The element of competition in this exercise will prove an effectual curb to the tendency to waste time in finding the actual word. Once a child can determine readily from the key words at the top, upon what page a word will be found, he will without difficulty extend the same principle to the finding of words upon that page. The necessary instruction for the finding of words in the pupil's own (small) dictionary is now complete.

(b) THUMB INDEX. In most schoolrooms, in addition to the individual dictionaries there will be a large unabridged dictionary. The use of its patent thumb index can be explained by immediate reference to the book itself. On the right-hand edge of the front cover will be found the letters in the first half of the alphabet, from "A" to "M" inclusive. If the word you want to find begins, say, with "G," reach immediately below the "G" upon the cover until your finger catches upon a notch cut in the edges of the pages. Simply pull up with the finger and you will open the dictionary at "G." If a letter in the last half of the alphabet, "N" to "Z" inclusive, is desired, the place can be found from the letters which are plainly visible in the notches upon the front edge of the volume. If the dictionary is already open the position of the letters not in plain sight in the notches is indicated by letters printed on the margin of the page directly above the notches. Additional rapidity in the finding of the word results if mental note is made of the part of the letter in which the word will be found. *Cabal*, for example, would obviously be in the first part of "C," whereas *cyclone* would be near the end. Anyone looking for *system* will be more than two hundred pages nearer in a large dictionary if he opens at the beginning of "T" than if he opens at the beginning of "S."

3. Pronunciation. In teaching children to interpret the diacritical marks used to indicate pronunciation in a dictionary, the teacher will get the readiest response by working from the specific to the general. First take the particular case. How should one pronounce *Sagittarius?* It will be found on page 503, with the pronunciation, as given in parentheses, *săj′ĭt-tā′rĭ-ŭs*. In helping the child to interpret this the teacher should be especially careful to give only such help as is needed. The child is not nearly so badly off as may be thought. If he is left alone, ***and not worried,*** he will pronounce all of the consonants in the above spelling correctly. The first real difficulty is the ă. Have the class look in the key lines at the bottom of the page until a word is found illustrating this ă. The word turns out to be ăm, found in the first key line of the left-hand page. Have the class pronounce ***am***, and afterward pronounce it, "leaving out the m." This gives the ă sound, which can now be applied to the syllable in question, săj. Each of the other marked letters can be similarly found and applied to its syllable, and the word pronounced giving each syllable an even stress (that is, neglecting the accents). Then the teacher should explain that the ***heavy*** mark, ′, means a ***heavy*** accent, and the *light* mark, ′, a *light* accent. Use these accents in pronouncing the previously learned syllables, and you have pronounced Sagittarius.

(a) DIACRITICAL MARKS. By the use of the key line the child is now in a position to determine the pronunciation of any word in the dictionary. He is, however, wasting a little time on every pronunciation that he looks up, because he does not ***know*** the diacritical marks. As soon, therefore, as the ability to use the key line is thoroughly established, the memorizing of the symbols used to indicate pronunciation should be begun. The task is by no means so complicated as it would appear at first sight. Upon page viii will be found a table of 64 "symbols used to indicate pronunciation." Some of these the pupil already knows; ***b, ch, d, f, h, j, k, ks, kw, l, m,*** *n,* ***ng, p,*** *r, sh, t, v, w, y, z* will present no difficulty, because used with their ordinary English values. Almost equally plain are *g* ("hard," never like j), *gz*, *hw*, *oi*, *ou*, *s* (never like z), and *zh*. The first thing to be learned is that the long mark (macron) over a vowel, as *ā*, *ē*, *ī*, *ō*, *ū*, indicates the name sound of the vowel. In other words, name the letter and you have the desired sound. A similar mark with a shorter vertical line upon it (⊥) indicates shortening or obscuration due to position in an unaccented syllable. The examples given are *senā̍te*, *ē̍vent*, *ō̍bey*, *ū̍nite*.

To the memorizing of the other symbols used there is no royal road. The differences between ȧ, ä, â, and ă, or between ô, ŏ, and ø, require a sheer effort of memory. The problem of learning these symbols is, however, by no means beyond the average school child if he can be kept interested in it. It may prove helpful to some children for the teacher to provide nonsense verses which give the key to the symbols. As an example, ȧ, ä, â, and ă may be differentiated by a jingle like this:

"One dot, two dots, roof and bowl
Ask pa if he dares whack the mole."

The ȧ, ä, â, and ă are found in ȧsk, pä, dâre, and whăck. Or ô, ŏ, and ø could be learned from

"Roof and bowl, and crown as well
A lord must nŏt write døggerel."

Caution. In the process of teaching the use of symbols to indicate pronunciation it is desirable that the teacher should not lose sight of the essential simplicity of the problem. What is sought after is that the child shall be able to pronounce a word after he has consulted the respelling in the dictionary — and this only. The aim is not to teach him tongue positions, or the principles of phonetics, or the analysis of speech sounds. All this may be of value to the teacher, but it is valueless, or worse, for the young child. It is for this reason that the treatise on pronunciation that is such a useful feature of the large Webster's is omitted from the small ones. The child, who has learned to talk by imitating sounds that he hears, and not by being told how to hold his mouth and manipulate his tongue, can be taught a sound, or its symbol, only by reference to a familiar word in which it occurs. It is quite useless to tell him that ä is a mid-back-wide vowel; tell him that ä is the "a" sound in *far* and he comprehends at once. Why shouldn't he? He has been speaking ä's all his life, like Monsieur Jourdain with his prose. You are not teaching him ä, but identifying it for him.

Let the teacher by all means absorb all the phonetics that he can digest, but let him not suggest phonetic difficulties to the child for the sake of solving them. If the pupil can *use* the pronunciation in a dictionary it makes small difference whether or not he knows a sonant from a surd.

4. Synonyms. The first word in regard to synonyms should be a caution. Distrust any extended treatment that does not justify its distinctions by citations from standard authors. Synonymy has to do with literary and stylistic distinctions of the most subtle kind. No one man, even though he be a Walter Pater, a Stevenson, or a Henry James, can write it satisfactorily out of his own head. On the other hand it is possible, without any reference to actual literary usage, to write synonymy that reads pleasantly and furnishes interesting and striking distinctions. Most of that found in dictionaries is written in just this way. So made it may be ingenious and stimulating; it is true only in spots.

In a large dictionary, then, one ought to demand not only that the synonymy be done by competent men, but also that they support their distinctions, not by manufactured examples, but by citations from standard authors. The synonymy of a small book, where extended citations are impossible, can be trusted only when based on a more extended treatment fulfilling the above-mentioned conditions.

Once the teacher is assured that the class has access to trustworthy synonymy, his next task is to make it necessary for them to consult it. Among the numerous ways of doing this, perhaps the most successful, is that of reconstructing an actual passage from a standard author. The passage chosen should, of course, be unfamiliar to the class.

As an example of this method, take the following lines from Matthew Arnold:

> Nature formed Milton to be a great poet. But what other poet has shown so sincere a sense of the grandeur of his vocation, and a moral effort so constant and sublime to make and keep himself worthy of it?

The second sentence can be given to the class in the following form, with directions to choose in each case the most suitable of the bracketed words.

> But what other poet has shown so [honest, sincere] a sense of the [augustness, grandeur, sublimity] of his [avocation, vocation], and a moral effort so [constant, continual] and [magnificent, splendid, sublime, superb] to make and keep himself worthy of it.

With the reconstruction of this sentence should go a discussion of why one of the alternative words is more suitable than another. At the end, the sentence can be given in Matthew Arnold's own form, and comparison made with the reconstructed versions.

5. The Teacher's Preparation. (a) ENTHUSIASM. The prime requisite of the teacher who is to teach dictionary work is a personal enthusiasm for the "amazing phenomenon of articulate speech." No one to whom words are mere symbols can inspire the pupil with a real and lasting interest in the language that he speaks and reads and thinks.

Teachers who have had linguistic training of collegiate grade will almost certainly have acquired the enthusiasm for words. For the others who have been denied this training there is no single work in English that will be found so stimulating as ***Words and Their Ways in English Speech***, by Greenough and Kittredge. This interesting book will not only give the teacher a new insight into linguistic processes, but will furnish scores of examples of curious etymologies and sense developments that he can from time to time pass along to the student. Upon the subject of words there are also two excellent books in French, both fortunately available in English translations: Darmesteter's *La Vie des Mots*, and Bréal's *Essai de Sémantique*.

(b) THE DICTIONARY HABIT. It is important that the teacher should himself have the dictionary habit. One who is willing to slide over strange words in his own reading will hardly be able to induce pupils *not* to do so in theirs. On the other hand there can be no more effective object lesson for a class than to find that the teacher habitually uses the dictionary for his own instruction. It is wholesome also for a class to know that art is so long and time so fleeting that not even the wisdom of the teacher can compass all the knowledge that is in such a book. The teacher will indeed do the class a serious wrong if by any pose of his own he allows it to appear that the dictionary is necessary only for children and beginners.

(c) CONVENTIONAL DEVICES. A teacher should be familiar with all of the conventional devices that are used in dictionaries. First among these are conventions of arrangement. Single words are arranged alphabetically. That we all know. Two-word phrases beginning with an adjective will be found after the adjectives. Compare, for example, in Webster's New International, the list of phrases upon page 1667 which follow the adjective *Polish*. Two-word phrases beginning with a noun are put in their regular alphabetical place, that is, treated as if they were single words. Compare *police power* and *policy slip* upon the same page. Phrases of more than two words will be found under the first important word. Compare the long list of phrases under the verb *take*.

(d) ARRANGEMENT OF DEFINITIONS. The arrangement of definitions should also be understood. In almost all first-class dictionaries (including the Oxford English Dictionary, Webster, and the Century) the definitions are arranged in their historical order, the oldest first. This is done, in the first place, so that the intelligent reader can make an independent survey of the sense development of the word, and, in the second place, because it is the only plan that can be followed systematically and consistently. The historical order can be determined by definite historical evidence; any attempt to arrange the definitions in the order of their frequency in present-day use resolves itself into the whimsical personal preference of the editor.

In hunting for a definition in some particular science or art, advantage can be taken of the fact that a technical definition of any sort is preceded by a label. If a person who has recently bought a camera wishes a definition of *negative* he does not need to read all the definitions of *negative*, n., but can let his eye run down the column until it lights upon the label *Photog.* If he reads that blue vitriol is a *salt* of copper he is on the lookout for the label *Chem.* when he finds *salt*, n. in the dictionary.

(e) RIGHT USE OF WORDS. Another point that the school teacher should bear in mind constantly is that not all words in the dictionary are "good" words in the schoolmaster's sense. When a boy justifies the use of *swipe* in the sense of *steal* because he found it in the "big dictionary" the teacher should have the answer at hand, "But what did you find at the end of the definition?" If the dictionary has been carefully edited this sense is marked *Slang*, thus definitely forbidding its use in anything approaching formal discourse. The proper application of restrictive labels like *Obsolete*, *Colloquial*, *Slang*, and the like, is the only guide the user of the dictionary has as to the present-day status of the word. Even these labels are not a safe guide unless the user of the dictionary knows accurately what they mean. The pupil certainly will not know without special instructions. In the case particularly of dictionaries for school use these restrictive labels are of prime importance.

All of the points about a dictionary that a teacher should know are likewise points that any user of the dictionary will find valuable. The teacher will find, however, that they can be most readily taught one at a time, *as they come up*. The boy who has been denied the use of *swipe* because of the label will in the future beware the labels.

6. Etymologies. Etymology, in many respects the most interesting and least understood feature of a dictionary, is wisely deferred until the later years of the grammar school, or even until the high school. The form in which etymologies are given is so highly conventionalized that the user of them requires no little preliminary training if he is to interpret accurately what he will find in any good dictionary. For the sake, then, not only of the teachers who must teach etymology, but also of every mature user of the dictionary, let us take a few examples, passing from easy ones to some of the more difficult, and turn the concise, conventionalized statements into terms of ordinary speech.

> *fulcrum* [L., bedpost, fr. *fulcire* to prop.]

Fulcrum is from the Latin word *fulcrum*, meaning bedpost, and this in turn is from the Latin *fulcire* to prop. The Latin noun is spelled like the English *fulcrum*, because if it were not, its spelling would be given. Notice that the abbreviation L. (for Latin) at the beginning, applies to *fulcire* as well as to (unwritten) *fulcrum*.

> *stone* [ME. *ston*, *stān*, AS. *stān*; akin to OS. & OFries. *stēn*, D. *steen*, G. *stein*, Icel. *steinn*, Sw. *sten*, Dan. *steen*, Goth. *stains*, Russ. *styena* a wall, Gr. στία, στίον, a pebble. Cf. STEEN.]

Stone, spelled in Middle English *ston* and also *stan*, is from the Anglo-Saxon word *stān*. Here the etymology could end, but because *stone* has cognates (words of similar ultimate origin) in many languages, some of these are given. "Akin to," in an etymology, simply means "is a cognate of." The English word "stone" is not derived from the Old Saxon or the German or the Greek word, but all of these come from a common (unknown) source in the primitive (hypothetical) Indo-European or Aryan speech. Or we can say, borrowing a term from genealogy, that the Anglo-Saxon, German, Dutch, and the other words are collaterally, and not lineally, related. Notice also that in the cases where the meaning of a word is not given it is the same as that of the English word "stone." At the end of the etymology is "Cf. STEEN," which means simply that "steen" is an English word related to "stone."

> *carpenter* [OF. *carpentier,* F. *charpentier,* LL. *carpentarius,* fr. L. *carpentum* wagon, chariot.]

Carpenter is from the Old French *carpentier,* which comes from the Late Latin *carpentarius,* which comes from Latin *carpentum,* meaning wagon or chariot. The (modern) French *charpentier* is inserted merely as a point of additional interest, French being familiar to so many more people than Old French. *Charpentier* is not an ancestor of *carpenter,* but a brother.

> *explode* [L. *explodere, explosum,* to drive out, as a player by clapping; *ex* out+*plaudere, plodere,* to clap, strike, applaud: cf. OF. *exploder.* Cf. PLAUDIT.]

Here the difficulty lies in the direction to "compare Old French *exploder.*" This means that while the English word came from the Latin, the immediate source may have been Old French *exploder,* which itself comes from Latin *explodere.*

> *salary* [L. *salarium* pension, stipend, orig., salt money, the money given to the Roman soldiers for salt, which was a part of their pay, fr. *salarius* belonging to salt, fr. *sal* salt: cf. F. *salaire.* See SALT.]

Notice that the sense development of this word was largely completed in Latin, before it came into English or into French. The reference "See SALT" directs the reader to the cognate native (Anglo-Saxon) word where will be found a list of cognates in various languages.

> *flourish* [ME. *florisshen, flurisshen,* OF. *flurir, florir,* F. *fleurir,* fr. L. *florere* to bloom, fr. *flos, floris,* flower. See FLOWER, 2d -ISH.]

The thing to trouble us is how the Middle English came to have *-issh-*. If we look up the second suffix *-ish*, as directed at the end of the etymology, we shall solve the problem. We can summarize what we find under *-ish* by saying that the *-ish* in flour*ish*, cher*ish*, and similar words is due to an *-iss-* in certain forms of the French verb ending (in the infinitive) with *-ir*. Compare *fleurir* to flourish, *nous fleurissons*, we flourish, *fleurissant*, flourishing. The French *-iss-* is itself due to the same Latin inchoative suffix that is found in Latin *dormisco*, I fall asleep (from *dormio*, I sleep).

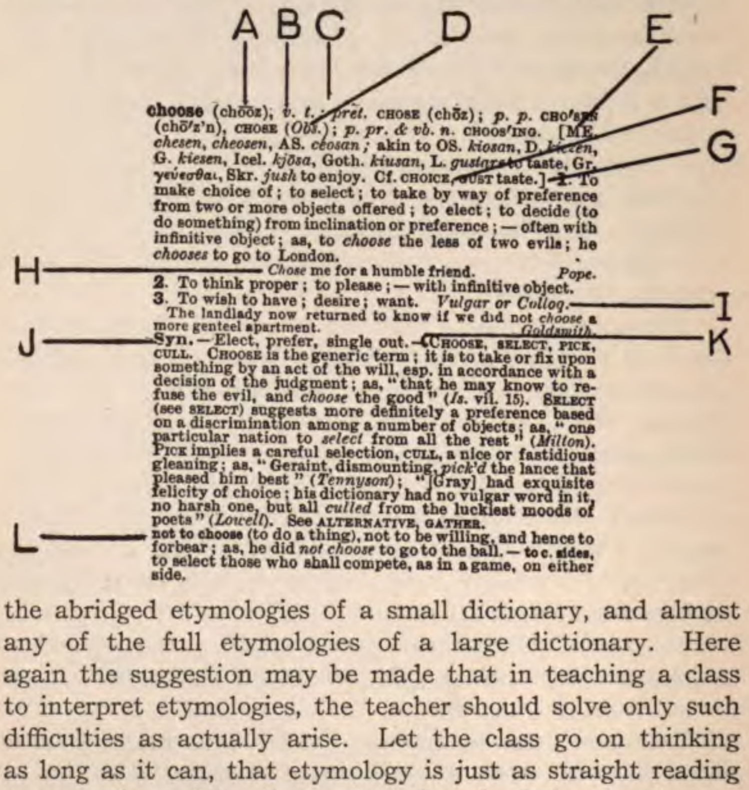
> *apron* [ME. *napron*, OF. *naperon*, F. *napperon*, dim. of OF. *nape*, F. *nappe*, cloth, tablecloth, LL. *napa*, fr. L. *mappa*, napkin, table napkin. The initial *n* was confused with the *n* of the indefinite article. See MAP; cf. NAPERY.]

The second sentence may cause trouble. It means that the *n* of the Middle English *napron* has dropped because the phrase *a napron* has been misunderstood as *an apron*. (Similar loss of an initial *n* may be found in the English words *adder* and *umpire*.) The reference "See MAP" is for the sake of furnishing the additional information, found in the etymology of *map*, that the Latin word *mappa* is of Punic origin. The direction to compare NAPERY calls the reader's attention to a related word, interesting because it has not lost the initial *n*.

> *purvey* [ME. *purveien*, *porveien*, OF. *porveeir* (pres. 3d pl. *porveient*), *porveoir*, F. *pourvoir*, fr. L. *providere*. See PROVIDE; cf. PURVIEW.]

The query here is why the third person plural, present tense, is given, when it is not given usually. Here it is of value because it shows the same vowels as the final syllable of the Middle English word shows, and may well be the Old French form from which the Middle English word is derived. The "See PROVIDE" directs the reader to where will be found the meaning and derivation of Latin *providere*.

The foregoing discussion, while not exhaustive, takes up some of the typical difficulties of the interpretation of etymology. The illustrative examples (from Webster's New International Dictionary) are harder than will be found in any of the abridged dictionaries for the use of the individual pupil. The teacher should be able, if the preceding discussion has been well understood, to explain any of the abridged etymologies of a small dictionary, and almost any of the full etymologies of a large dictionary. Here again the suggestion may be made that in teaching a class to interpret etymologies, the teacher should solve only such difficulties as actually arise. Let the class go on thinking as long as it can, that etymology is just as straight reading as any other print. In small dictionaries it is, almost.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choose (cho͞oz); *v. t.*; *pret.* CHOSE (chōz); *p. p.* CHO'SEN (chō'z'n), CHOSE (*Obs.*); *p. pr. & vb. n.* CHOOS'ING. [ME. *chesen, cheosen*, AS. *ceosan*; akin to OS. *kiosan*, D. *kiezen*, G. *kiesen*, Icel. *kjōsa*, Goth. *kiusan*, L. *gustare* to taste, Gr. γεύεσθαι, Skr. *jush* to enjoy. Cf. CHOICE, GUST taste.] 1. To make choice of; to select; to take by way of preference from two or more objects offered; to elect; to decide (to do something) from inclination or preference; — often with infinitive object; as, to *choose* the less of two evils; he *chooses* to go to London.

Chose me for a humble friend. *Pope.*

2. To think proper; to please; — with infinitive object. 3. To wish to have; desire; want. *Vulgar or Colloq.*

The landlady now returned to know if we did not *choose* a more genteel apartment. *Goldsmith.*

Syn. — Elect, prefer, single out. — CHOOSE, SELECT, PICK, CULL. CHOOSE is the generic term; it is to take or fix upon something by an act of the will, esp. in accordance with a decision of the judgment; as, "that he may know to refuse the evil, and *choose* the good" (*Is.* vii. 15). SELECT (see SELECT) suggests more definitely a preference based on a discrimination among a number of objects; as, "one particular nation to *select* from all the rest" (*Milton*). PICK implies a careful selection, CULL, a nice or fastidious gleaning; as, "Geraint, dismounting, *pick'd* the lance that pleased him best" (*Tennyson*); "[Gray] had exquisite felicity of choice; his dictionary had no vulgar word in it, no harsh one, but all *culled* from the luckiest moods of poets" (*Lowell*). See ALTERNATIVE, GATHER.

not to choose (to do a thing), not to be willing, and hence to forbear; as, he did *not choose* to go to the ball. — **to c. sides**, to select those who shall compete, as in a game, on either side.

7. What a Large Dictionary Tells about a Word. A. — It gives the pronunciation. (A list of familiar words at the bottom of each page shows the meaning of the diacritical markings.)

B. — It tells the part of speech to which a word belongs and, in the case of a verb, whether it is transitive or in-transitive. (A table of the abbreviations used will be found just before the main vocabulary.)

C.— It gives the preterit, past participle, present participle, and verbal noun forms of a verb.

D.— It indicates by the abbreviation *Obs.* (obsolete) whenever a form or a definition has gone out of use.

E.— It tells the origin of a word, and its history before it came into English.

F.— It refers to related words, many of which are so unlike in form that the relationship would not be guessed.

G.— It defines a word, giving the definitions in their historical order, oldest first.

H.— It gives citations from standard authors illustrating the use of a word.

I.— Whenever a sense of the word is not in good literary use its exact degree of respectability is indicated.

J.— It gives a list of other words of similar meaning.

K.— It distinguishes, by explanation and literary citations, between these words of similar meaning.

L.— It explains idiomatic phrases in which the word is used.

8. Conclusion. When the teacher has by the various means outlined brought the pupil to the desired state of proficiency in the use of the dictionary, there remains only the task of seeing that this acquired proficiency is put to daily use. With the large increase in the past few years in the quantity, and the vast improvement in the quality, of literature read in schools, this should be an easy matter. A modern school course in literature bristles with words unfamiliar to the pupil. It is better in every way to have these words looked up in a dictionary than to rely on an annotated text. The spoon-feeding methods of the texts "especially prepared for school use" rob the pupil of all initiative. Moreover the information that comes with little effort does not stick as does the information that is dug out.

In addition to the use of the dictionary in connection with literature, the teacher can stimulate interest by judicious selection of interesting words for the pupil to investigate in a large dictionary. The stimulus will be the more effective if the words are not thrown at the pupil's head, but come up, or can be made to come up, in general reading. Examples of the sort intended are, for etymology, ***nasturtium***, ***candidate***, ***treacle***, ***pedagogue***; for sense development in English, ***naughty***, ***hearse***, ***gossip***. The teacher's responsibility ceases when the pupil turns instinctively to the dictionary for light upon new words. The "dictionary habit," once acquired, is an everlasting possession.

CHAPTER THREE

COMMUNITY INTERESTS

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Editorial Note: The rapidly growing interest in a more widely extended use of the schoolhouse is a most hopeful sign in community life. For the purpose of emphasizing this important movement, the publishers of *Public School Methods* engaged Prof. Edward J. Ward of the United States Bureau of Education, Washington, D. C., to prepare the chapter on *The Community Center*. There is no better authority on this subject than Prof. Ward. "Edward J. Ward discovered the schoolhouse," said Frederick C. Howe in the *Saturday Evening Post*. In 1907 Prof. Ward became supervisor of the wide use of the public school property of Rochester, N. Y. His work there attracted wide attention. In 1910 he became a member of the Extension Division faculty of the University of Wisconsin, where he continued his work on a state-wide plan, until 1916, when he was called to the United States Bureau of Education, and given an opportunity to extend his work throughout the country.

1. The Community Home. "Without the men and women of the community organized to meet in the Schoolhouse, we felt that this institution represented a sort of orphanage, an abnormal and unnatural disconnection between the association of the adults and the association of the young people of this neighborhood. With the men and women assembling here in authoritative common council, understanding and coöperation would develop among them, the necessary pattern and example would be given to the older youth for whom this Building is properly the training place in self-government, and the continuity of the educational process, which is merely begun with the instruction of the children, would be realized. And we saw that this would mean the natural fulfilment and completion of this otherwise unfinished Community Home.

In that statement is set forth the perception of Miss Frances S. Fairley, the Principal, and Miss Cecil B. Norton, a teacher in the Grover Cleveland School of Washington, D. C., which led to the organization of the Grover Cleveland Community Forum, which, in turn, occasioned the drafting and introduction in the United States Congress of "The Hollis-Johnson Community Forum Bill," the measure that is recommended to each local community, to each State, and to the Nation as a whole, as furnishing the simple, consistent, practical plan for effective Community Center development.

In this conception of the public school as the unfinished community home is suggested the profound historic significance and prophetic potentiality of this characteristic institution of America, in which we have taken the children and set them in the midst. Such mutuality and power of coöperation as human beings have attained, otherwise than under the compression of fear, has been developed through adult association within the little sphere of the unit home, which was created by the uniting and liberating presence of the child at its heart. In the Public Place-of-the-Children is established this living nucleus for the fear-free organization of society. It is the sure foundation of the essentially sacred institution in whose fulfilment as the all-integrating and articulating medium of our common life, shall be realized — within the larger sphere of political and industrial relationships — the intrinsic democracy, the practical coöperation, which as yet we have learned only within the little circle of the primitive family group. As the sincere expression of the Soul of Humanity coming to find and free itself in America — the public school — developed

naturally into the community home — is inevitably to be the channel where through

The blood that left the Common Heart
Shall leap with common pulse again.

This conception not only describes the goal, but tells the spirit that should inform and pervade all the steps to the fulfilment of the Community Center. Its atmosphere should be that of the ideal and normal home, confident, comfortable, interesting, hospitable. The Community Center developed through the completed use of Number Fourteen Public School in Rochester, N. Y., was the one in which former Justice Charles E. Hughes said: "I am more interested in what you are doing and what it stands for than in anything else in the world; you are buttressing the foundations of democracy." It was this same center in which, on a Community Sunday Afternoon, an Italian-born American said those words which, more than any others, conveyed to President Wilson the deep spiritual significance and great promise of the community center movement, "Here, for the first time I find realized what I dreamed America would be when I was in Italy." But no appreciation of the success approximated in that particular community center went closer to the heart of it than the observation of a traveling man who, as a resident of its district, was a member there: "Won't it be ***homelike*** when other places take up this idea? One will always know that there is a friendly, interesting place where he can spend an evening, where class lines, religious and political differences don't count, where people are just 'folks.'"

But the conception of the fully used public school as the community home is more than evidence of sociological insight, and a description of the atmosphere that should pervade and comprehend this institution. This conception suggests and emphasizes certain cardinal principles of internal organization and external relationship which must be observed if the community center fulfilment of any public school is to be consistent, harmonious, vital.

2. Not a Hotel. The first essential characteristic of a home which must be reproduced in the community center use of the public school, if this development is to be consistent — indeed, if it is to be a *community* and not a *disunity* development — is that it is a membership of individuals, not an aggregation of groups.

Writes a public school principal:

> Yes, we have a "wider use of the school plant," but if unity is an essential quality of "community," then we can hardly say that this is a "Community Center." In the first place, the school building is used for voting. This means that, at election times and for the registrations, I am shoved aside, and a half dozen men, who are entirely out of harmony with the spirit of the school, come in to take charge of its use. Then the building is loaned out for political meetings, first of one party, then of another. I have nothing to do with them nor they with the school except to use its building as they would a rented hall. And finally the various churches have permits for their Sunday school basket-ball teams to use our gymnasium, and for their boys' and girls' clubs to use other parts of the building. There is no more unity of organization among the people who use the various free times and spaces of this school plant than there is among the people who happen to occupy the separated rooms of a hotel.

The characterization is apt. The increased use of the public school equipment, in the recent years of its conscious promotion, has, in many parts of the country, had the character of a *hotel* development in contrast to that of a *home*.

It was inevitable, and being inevitable was justified — as a way of beginning. It was, in miniature, precisely like the beginning of the use of this continent. At first the various colonizing groups came here, each under the auspices of an outside established organization. But, inevitably from the beginning the course of progress was toward the single liberating and empowering integration of the people gathered here. If that unification had not been begun, if the practical means of this integration had not been thought out and established, the life on this continent would have had no significance or promise for the world.

In 1911, the National Education Association, in its first official endorsement of the community center movement, used these words:

> The school buildings of our land and the grounds surrounding them should be the radiating centers of social and cultural activity in the neighborhood, in a spirit of civic unity and coöperation. To safeguard, however, the integrity of our schools — which are in reality the homes of our children during a large part of their waking hours — so that the subtle elements residing in the atmosphere of a well regulated school may be preserved, this wider use of the school plant should be controlled exclusively by the school authorities.

Of course the phrase "controlled exclusively by the school authorities" raises a vital question which demands careful consideration; but the object declared for — to assure consistent unity and integrity of development as the public schools become, not merely "the homes of our children" (This use of the word "homes" as designating the abiding places merely of children is similar to its frequent rather pathetic use to designate orphanages.) but true all-including community homes — is so obviously elemental and vital that it seems strange that it should not have been seen all along.

The essential reason why, during this pioneering period, the development which has come about in the "wider use of the school plant" has largely had the disorganized and transient-housing character of a *hotel* rather than the rooted and continuing integrity of a *home*, is quite analogous to the reason why, in the beginning of the white man's use of this continent, there was the disunity of an aggregation of colonial groups. The reason is suggested in the phrase which has been characteristic of this period of unorganized beginnings — "wider use of the school plant." That was all that was seen — the school *plant*. It was simply the perception of the physical building. It was seen merely as a usable *place* unoccupied during evenings and Sundays and much of the time — just an unoccupied *place*. Let it be occupied! It was like the first view of America. To the peoples of Europe, it was just an unoccupied *plant*.

Of course, the failure of the Europeans back there to picture what America was to be, was not strange, for there was nothing here to give the clue. It does seem strange that the view of the public school in its great meanings of fulfilment should have so commonly stopped at the perception that here is merely a physical *plant*, when, in the essential nature of the established use of this plant, the outlines of the completed institution are so obviously indicated.

But — strange or not — the various and conclusive demonstrations that the public school equipment may be used as the polling place, as the forum of political discussion, as lecture and music hall, motion picture theater, young people's club house, recreation center, branch public library, health office, employment bureau, art gallery, and headquarters of unnumbered sorts of coöperative enterprise, have come about largely through the policy of permitting the public school buildings to be used under other than public educational auspices.

Today, in the natural course of events — as natural as that which proceeded from the disunited colony — occupation of this continent to the conscious beginning here of national organization — the movement for the fulfilment of the Public School has advanced from the effort merely to get the buildings open for an undefined "wider" use — any sort of way — to the point where the problem is seen to be, not "whether," but "how."

This evolution is seen in a comparison of the spirit of the First National Conference on Community Center Development, held at Madison, Wisconsin, in 1911, with the National Conference on Community Centers, gathered in New York in 1916. The spirit of that five-years-ago meeting was the thrill and enthusiasm of a great *discovery*. There was clear vision of the immense meaning of this movement in President Wilson's opening address and throughout the conference, but for the most part, that meeting was simply the expression of a great many people of the Nation's amazing discovery of the schoolhouse, the spirit which called forth such an expression as that of Edwin Markham, with which the conference was opened:

We men of earth have here the stuff
Of Paradise. . . .

The message of that conference was simply, "Here, ready to our hands, is the most marvelous social equipment that has ever appeared upon this earth. In the name of common sense, let us use it!" The gathering at New York in 1916 seemed less inspiring. It was actually more inspiring, for it marked the nation-wide advance of this movement in a half-decade to the point of focused consideration, not of the question *whether* the public school equipment should be made available for the use of all the people — everybody everywhere having come to practical agreement as to that general proposition — but *how* this community development shall be organized. No poem, no great address, here — but the careful thinking-out and formulation of the essential principles of proper Community Center organization.

Public buildings should be available for the use of the people as a right instead of a permission.

Tax money should be used in the promotion, development, and maintenance of community centers.

Community centers should be administered through responsible public officials.

Back of this threefold declaration has gone an accumulation of varied and convincing experience of the friction, confusion, and sporadic uncertainty of having public school buildings given over on permission for use under partisan, sectarian and other private auspices — of the indignity and insidious danger of private support or endowment of activities in the public schools — and of the jealousies and antagonisms that result from the policy of having offices of inherently public service occupied by irresponsible private individuals.

The colonial period, the pioneer time of mere unorganized occupancy of the public school plant under outside auspices — the time when there was nothing better than to have this building opened for use after the fashion of a hotel — is past. The time for integrating the constitution of the community as one of membership of individuals is here. The present program is not merely to get the community house opened, but definitely to complete therein the construction of the community home.

3. The Community Executive-Secretary. The key to the problem of consistent community center development is in the *completion* of the official responsibility of the public school principal.

To revert to the great example of community organization through which this nation was formed: When the people on this continent came to the point of desiring to form one unified association, the essential thing that they had to do was to establish one central unifying office. If they were to place that office over them in authority, this would be a kingdom. If they were to place it under them as that of an executive, this would be a democracy. In either case that community organization would have been absolutely impossible without the uniting official. Precisely the same necessity holds for community organization within the smaller sphere of the primary public school district. The establishment of a central office into and through which all lines of administration are focused is the absolute requisite without which community center organization is impossible. The question then is, What is the status of this community official — for upon his status depends the essential character of the organization.

As the administrator of the instruction of the children of the community, the public school principal is now the executive agent under the association of adults of the community. He is now the prime minister, the first servant of the community association of the mature in the administration of their prime duty and responsibility, which is their duty and responsibility for the welfare and training of the immature. Thus, for the public school principal consciously and actively to serve as the executive agent through whom the community association of adults finds and expresses itself is simply to fulfil the implication of his present office as the servant in the neighborhood house. By his present responsibility for the instruction of the children, his status is fixed. He is definitely ***under*** the authority of the association of adults, as he is in authority ***over*** the children. To be sure, the public school principal is more than a local community official; he is also a town, or city, a county, and a state official, and with the federalizing of education, he is to be a national official, but, by as much as he is the administrative agent of the parental responsibility of the association of adults in the local community, he is necessarily ***under*** them as he is ***over*** their children.

The title *Secretary* has come to be adopted as descriptive of the community executive's official position, not only because it properly suggests his subordinate position in relation to the authoritative organization of the adult citizenship of the community and the analogy to the office of "secretary" of a Y. M. C. A. or similar institution, but because of the appropriateness of the term in its original meaning as describing this community official's function. *Secretary* means ***keeper of secrets***. It is a simple fact about people everywhere that, concerning them, there are two sets of secrets. On the one hand, there are the secrets of depravity, pettiness, cruelty, greed — the Mr. Hyde potentialities of every individual, in which he is worse than he pretends to be. On the other hand, there are the secrets of aspiration, greatness of soul, kindliness, unselfishness, the Dr. Jekyll side, in which each of us is better than he seems. Each of us presents this better side toward the children. The public school principal, as the agent of our interest in the welfare of the children, is the keeper of these nobler secrets of every community, the secrets that represent the forces that shall be set free in the development of the community home.

The propriety and need of legislative provision for properly recognizing and, with definite remuneration, fixing responsibility for executive-secretarial service in order to assure general and consistent community center development was stated by Charles P. Cary, State Superintendent of Education of Wisconsin, in his call to the Conference on Community Secretaryship as Public Service in 1914:

> The movement for developing the civic, social, and recreational — that is, the larger educational — resources in each community through the use of the public school building by adults for civic expression, by older youth for training in self-government, and by the whole community for wholesome recreation, has grown in the past few years out of the tentative and experimental stage. We know from the experience of many places in Wisconsin and elsewhere that systematic community center development is possible only where there is the definite placing of responsibility for executive-secretarial service in each community.

In the Community Center Pageant with which the first community to do so (Sauk City, Wisconsin) celebrated the inauguration of the public school principal as community executive-secretary, occurred this colloquy:

(Following speeches in which business men, farmers from about, women, youngsters and officials voice their several lamentations over the lack of community spirit and ask, "Who is to blame?"— Enter "Nobody," a shrouded, gray and gloomy figure.)

Nobody I am to blame. I am nobody!
The town, you say, is dead,— and, Who's to blame?
No Welcome is there here,— and, Who's to blame?
Your lives, you say, are bleak,— and, Who's to blame?
Your youth goes city-ward,— and, Who's to blame?
Your leaders lack support,— and, Who's to blame?
The things that should be done are left undone!
It's everybody's business — So, it's mine;
I am Nobody.

All shout: Nobody is to blame. Away with Nobody.

Mayor: But citizens and neighbors all; we cannot be rid of this knave Nobody, unless we find Somebody to take his place. Who shall this be? Where and how shall we find the one on whom this service of us all shall fall, whose proper duty it shall be to vitalize the common interest, to serve our understanding and coöperation as one community?

(Enter throng of children from the public school, and with them — the principal.— At his coming, Nobody shrinks away.)

Business Man: Strange we haven't thought of this before. This servant of the community to whom we have entrusted the greatest enterprise of all, the training of the children, is the man to serve the interests of our business prosperity.

Farmer: He's the Neighborhood's reception committee to the future. He's the one to make a welcome here.

Woman: He is now responsible for our greatest common interest. He stands for the one thing that can get us together.

Boy: Say fellers, this means, sumpun doin' round here! I ain't goin' to the city.

Mayor: Why, this is just plain common sense. We should have done it long ago. The natural place for the citizens to meet in is the building that all the citizens own together, and the natural person to act as executive-secretary of our meetings and good times there is the man who serves us in our children's gathering there.

It is often necessary to reorganize the work of this office so as to give time for the added duties, and it is frequently necessary that assistance be employed, but the first step in consistent community center development lies in the recognition of the truth of Miss Margaret Wilson's declaration:

> The public school principal is the person to serve as community secretary. I foresee the time when this office will be recognized as the greatest in any community.

4. Make Schoolhouse Voting Center with Principal as Voting Clerk. In the Community Center Pageant above referred to — immediately after accepting as a part of his proper duty the official responsibility for service as the community's executive-secretary, the principal says:

> But, Neighbors, here is a difficulty. My service is not owed to any one or few. My service is to the membership of the community as a whole. How is this membership now realized? Where is it expressed? The uniting instrument of this established membership is the ballot box. There focuses the responsibility by which the active, authoritative membership of this community is joined as one body. How shall you use me as your common servant? How shall you use the public schoolhouse as the true head-and heart-quarters of the community when the common instrument of your responsible membership-expression is not there?

The spokesman of the citizenship responds:

> In the public schoolhouse the ballot box belongs. By it we are

> united in one sovereign body. Through its use our intelligence is registered. Through it our membership with other community-memberships in the great fellowship of the town, of the county, of the State, and of the Nation is expressed. For the sake of the example to our youth who gather there, and for its own dignity as the uniting instrument of our sovereignty, we will carry this Ark of the Covenant of democracy into the public schoolhouse — the center, the capitol, the home of our community.

What this Wisconsin community did with appropriate celebration — transfer the voting instrument from its former insignificant location to its worthy and appropriate place in the public schoolhouse — has been done as a matter of economy, convenience and common sense, but without fitting observance of its meaning, in Boston, New York, Chicago, Salt Lake, Los Angeles, and a thousand lesser towns, villages and rural communities between.

But — and here is the important fact to note, and the fact which challenges every community in which there is a genuine will for its consistent self-organization — when the schoolhouse has been made the voting center, there has not been the corresponding official adjustment by which the community executive, the public school principal, has been made the voting clerk. Thus, this concentering by which the public school building has been made the common headquarters of the community's adult civic expression as well as the young people's civic training, has lacked the essential adjustment which would make it the perfect first step in consistent community center organization.

At the First National Conference on Teacher Training, held in Chicago in September, 1915, the following pertinent resolution was unanimously endorsed:

> As a ready and practical means of saving public expense, and at the same time vitalizing the service of the public schools in civic education, we favor the use of all public school buildings for voting and for that orderly all-sided presentation and discussion of public questions, which is the prerequisite of intelligent voting.
>
> In order that this use of the public school plant as the civic headquarters of the community may be properly correlated with its use as the headquarters of the children's instruction, we recommend that —

when the public schoolhouse becomes the polling place and civic forum of the community—the school principal or other responsible employee of the school board associated with the principal be authorized to serve as the Secretary of the community and made responsible for the systematic organization of all the uses of the public school property.

There is, of course, no more reason for having several persons to render clerical service for the voting of citizens in any community today than there was for having several persons to render this service to the voters in the old New England town. Moreover, there is just one official responsible for serving as clerk in the voting of aldermen, state legislators, congressmen, and every body of representatives. Of course, there may be, as there are at present, volunteer or party watchers at the polls, but, obviously, it may be said with fairness that the person who is not worthy to occupy this office of voting clerk under the adult citizens is not fit to be entrusted with the training of their children.

As the first physical adjustment in community center development is to make the public schoolhouse the voting center of the community, so the first official adjustment is to make the public school principal the voting clerk of the community.

5. Community Forum Organization. The clearest, most concise formulation of the program of adult citizenship-organization for consistent community center development is given by President Wilson in these words:

> It is citizens going to school to one another in the common schoolhouses to understand and answer public questions as hitherto only representatives of the citizens have gone to school to one another in the buildings provided for them.

The establishment of the public school building as the polling place is the equipment for the "citizens going to the schoolhouse to answer public questions" which belongs with the organization of the community forum, the equipment for "citizens going to school to one another to understand" the questions that are to be answered.

In the last few years, there has been spreading the so-called *Open Forum* movement, promoted by men and women who have wakened to the vital necessity of providing opportunities for freedom of speech. In view of the danger of confusing the community forum, contemplated in the consistent use of the public schoolhouse as the community center, with the open forum it is well to note the distinction between these two institutions.

The first and best example of the open forum is Cooper Institute in New York City, from which, several years ago, Mr. George Coleman of Boston borrowed the idea which led to the use of Ford Hall for public meetings at which the persons in the audience are given some opportunity to ask questions of the speakers.

These open forums usually occupy private, *i.e.*, unneutral buildings, churches frequently being used; their financial support is from private sources; their policy is controlled by private individuals or by boards of directors or trustees; they are the meeting places merely of audiences — unorganized and gathered from wide areas. In view of these facts, it is significant that Mr. Coleman, a leading representative of this movement, has stated as the essentials of the "ideal forum" the following characteristics which belong not to the privately constituted open forum but precisely to the schoolhouse community forum:

> It must have a neutral meeting-place.
> It must be financed by the people themselves.
> Its policy must be controlled by the people themselves.
> It must serve the community as a unit.

Plainly, the one institution in each community which is capable of fulfilling these requirements is the community forum organized in the public school. Here when properly constituted, there is freedom of discussion, but this is not merely discussion for its own sake. It is discussion which properly leads to action. The forum and the ballot box are conjoined. It is precisely the organization of the adult citizens of the local school district to use the schoolhouse as the Town Hall was used in the old New England community except that, whereas the Town Meeting was yearly,

A COMMUNITY PLAYGROUND

this assembly of the citizens may be weekly; whereas the Town Meeting served for the discussion of local topics only, this Community Forum serves for the discussion of local, state, national and international questions, and whereas the Town Meeting was an assembly only of men, the Community Forum is properly the meeting place of the whole association of adult citizens, women as well as men.

But the supremely important fact to be seen is that this organization of the adult citizens is not unrelated to, but is constituted as the governing and controlling part of, the one organization of the community which includes provision for the training of the youth and the instruction of the children,—the combining of the two native expressions of the American spirit, the Town Meeting and the Public School, into one institution which has the completed character of the Community Home.

In the Hollis-Johnson Community Forum measure, above referred to, this relationship between the adult forum organization and the provision for the use of the schoolhouse by the young people is shown. As a thoroughly consistent and standard procedure for the organization of the community forum as the preliminary to the complete establishment of the community center, the method herein set forth may well be followed:

SECTION I. Upon written application so to do, signed by not less than twenty adult persons residing in the vicinity of any public school building, all of said persons being parents of children enrolled as pupils in said public school, the board of education shall define and fix the territorial limits within which adult persons must reside to entitle them to participate as members in the organization which may be formed, as hereinafter provided, to use said public school building as a community forum, and shall announce the date and hour of a meeting, which date and hour shall be not less than one week nor more than two weeks after the filing of the application, and shall make all necessary arrangements for the comfort and convenience and good order of the assembly of adult persons for said meeting, and shall direct the superintendent of schools or the principal of the school in which the meeting is to be held to call the meeting to order and to serve as clerk until it shall have been decided by a majority of those present and, by residence in the territory described by the board of education qualified to vote, that the Public School building is not to be used as a Community Forum, or until the organization of adult persons to use the Public School building as a community forum shall have been properly constituted, as hereinafter provided.

It will be noted that this plan provides for a *parental initiative.* The occasion of this provision is in the fact that throughout the South there are separate school systems for the white and colored people; this provision automatically assures that the initiation of the adult use of the building shall be consistent, in this regard, with its established use for children's instruction. As a rule the territory to be served by the forum will of course be the public school district, but there are cases where it is desirable to have this matter left open.

The calling of this formal referendum meeting provides the opportunity for a full consideration of the project, and its rejection or approval, in genuinely democratic fashion. Of course, as the preliminary to this formal meeting of the whole body of the citizens, information should be disseminated concerning the meaning of the community forum and community center as thoroughly as possible. Above all, at this initial meeting, the Principal, or his or her deputy, whose is to be the executive responsibility for its realization, should be prepared to lay the whole plan before the citizens. If the people have become reasonably intelligent, through this preliminary dissemination of the idea, regarding its essential meaning, there is likely to be no difficulty in assuring enthusiastic endorsement and hearty approval of the plan.

SEC. 2. If the proposal to use the Public School building as the Community Forum is approved at the meeting provided for in Section one, the adult persons, by residence in the territory described by the board of education qualified so to do may proceed to organize and elect necessary officers and prescribe and adopt by-laws and regulations for the conduct of the meetings of said Community Forum. The by-laws and regulations as adopted shall show that the primary object of the organization is public education through the open presentation and orderly free discussion of public questions, and nothing contained in the by-laws and regulations shall limit the attendance or membership of adult persons otherwise than as provided in Section one (*i. e.*, residents within the territory described are members by virtue of their residence). The by-laws and regulations shall authorize and provide for the Principal of the School, or a person nominated by the Principal, to serve as executive secretary of the organization.

Excepting for the three essentials, public educational purpose, all-inclusive community membership, and administrative unification with the established use of the school building through the appointment of the Principal, or a person nominated by the Principal and approved by the citizens of the community, to serve as Secretary, the constitution may have any form that the local organization desires. The details of meeting time, special assessments, and so on, must be decided by each community for itself. Simplicity and brevity are desirable. The Constitution here given is the one used by the Grover Cleveland Community Forum in Washington, with which Miss Margaret Wilson is officially connected and by which the Hollis-Johnson Community Forum measure was formulated:

PREAMBLE

Whereas we, the men and women of the neighborhood about the Grover Cleveland School, have a common and absolute responsibility for furnishing to the youth of this community a worthy and living example of proper civic devotion, and a common opportunity to refine and clarify the intellectual life of this community to the benefit and enrichment of its every member; and

Whereas to fulfill this obligation and realize this opportunity, it is necessary that there be established in our midst a public or community forum, which shall serve as the medium of our community membership, the place where we may go to school to one another in the understanding of the problems of our life together, and the instrument of our effective coöperation in the common interests; and

Whereas the public schoolhouse furnishes the ready and appropriate headquarters for this genuinely public educational expression:

Therefore we do organize and establish the Grover Cleveland Community Forum, to be used for the open presentation and all-sided discussion of public questions in the hearing and with the equal participation of the adult citizens of this community. And for our government of this forum we do adopt the following constitution and rules of order:

CONSTITUTION

ARTICLE 1.— *Name*

The name of this institution is the Grover Cleveland Community Forum.

ARTICLE 2.— *Object*

The object of this forum is to provide opportunity for the open and fair presentation and free discussion of public questions.

ARTICLE 3.— *Membership*

SECTION 1. The membership of this forum includes every adult (white) citizen residing in the public-school district of the Grover Cleveland School; that is, the territory from which children come to this building for instruction.

SEC. 2. Until proper and adequate provision is made for the necessary secretarial and janitor expenses to be paid out of public funds as other public educational expenses are paid out of public funds, there shall be a sustaining membership composed of all citizens who contribute 50 cents or more per year to be used in paying these necessary expenses of the forum.

SEC. 3. Until such time as there may be similar community forums established in other sections of the city, any adult resident of the District of Columbia may attend and participate in this forum assembly as though he were a resident of the Grover Cleveland neighborhood.

ARTICLE 4.— *Officers*

The officers shall be a president, a vice-president, a secretary, and a treasurer, and their duties shall be such as usually pertain to their respective offices. They shall be elected by majority ballot as soon after organization as possible, and thereafter annually at the first business meeting in October. They shall hold office until their successors have been duly elected. In case of the disqualification or resignation of any officer, the president shall have the power to make a temporary appointment, which shall continue in effect until the next business meeting of the forum association.

ARTICLE 5.— *Committees*

SECTION 1. There shall be an executive committee, consisting of the officers and the chairmen of the standing committees, which shall be charged with the special duty of promoting the interests of the forum. The secretary of the forum shall serve as the clerk of the executive committee.

SEC. 2. The president shall appoint a program committee, which shall coöperate with the secretary in securing speakers and arranging programs for the sessions of the forum, and an usher committee, which shall serve in the meetings of the forum.

ARTICLE 6.—*Dues*

SECTION 1. There shall be no dues for membership.

SEC. 2. The dues for sustaining members, to be paid until this properly public expense is assumed by the public educational support, shall be 50 cents a year.

SEC. 3. The dues are payable at any time to the treasurer, who shall keep an accurate report of all moneys and give to each sustaining member a receipt for the payment of his dues.

SEC. 4. Except by vote of the assembly at a public meeting no moneys shall be expended except in pay to the secretary and the janitor for their service at the rate of $4 to the secretary and $2 to the janitor for each session of the forum.

ARTICLE 7.—*Meetings*

SECTION 1. The regular meetings of the forum shall take place at 3 o'clock on Sunday afternoons, in the assembly hall of the Grover Cleveland School.

SEC. 2. The business meetings of the forum membership shall be held at the call of the president.

ARTICLE 8.—*Quorum*

A quorum for the transaction of business shall consist of not less than 20 members.

ARTICLE 9.—*Amendments*

This constitution may be amended by a two-thirds vote of all members present at any business meeting, provided that written notice of intention to submit such amendment shall have been given at a business meeting at least two weeks prior to the meeting at which the amendment is to be voted on.

RULES OF ORDER

The forum shall be called to order and the first principal speaker of the day introduced not later than 3 o'clock.

The formal address or addresses should be finished and the subject of the day thrown open for discussion not later than 4 o'clock.

The discussion should last not longer than three-quarters of an hour, and at its close the speaker or speakers should be given opportunity to sum up the discussion and answer questions.

The president of the forum shall see that the following specific rules are closely adhered to:

In speaking from the floor in the open discussion the parliamentary rules requiring addressing the chair, etc., shall be observed.

Speeches from the floor are limited to three minutes, and the time may be extended only by unanimous consent.

No speaker may have the floor a second time until all others who wish to speak have had opportunity to do so.

Speeches from the floor must deal specifically with the topic of the day as set forth in the formal address.

Sec. 3. That when an organization of adult persons shall have been formed and by-laws and regulations adopted as provided in the preceding sections, it shall be the duty of the board of education to make all necessary arrangements and provisions for the weekly, bi-weekly, or monthly meetings of such organization at such times as the organization may designate for its meetings. Amendments to the by-laws and regulations not in conflict with the provisions of Section two of this Act may be made from time to time as the organization may deem necessary. No public schoolroom shall be used under the provisions of this act during such hours as it is in use for the instruction of pupils, and the board of education may make such other regulations as it may deem necessary to protect the physical property from abuse.

It will be noted that the foregoing provisions have to do solely with the organization of adults, with the establishment of the community forum, in relation to which the board of education is not a directoral authority, its function of control being limited to protection of the physical property. The definite recognition of the right and responsibility of the adult association of the community, when properly organized, to determine its own program and policy is the primary essential of this plan. Now follows the provision for the completed community *center* of which the community *forum* is the logical preliminary:

Sec. 4. That whenever a public school building shall have been established as a community forum under the provisions of this act, and upon request to the board of education so to do by a majority of the adult persons present and qualified to vote at any regular meeting, the said board shall designate such building as a community center for the organized training and recreation of the young people of the community, including such activities as may be requested by the said adult organization and approved by the said board, and shall make all necessary and appropriate arrangements for the convenient and proper use of the building for community center meetings and activities at such times as the said adult organization may request and the said board approve. The executive-secretary provided for in Section two of this act shall serve as director of community center meetings and activities, and shall be responsible to the board of education for rendering this service. The said executive-secretary shall be provided with two assistants, one male and one female, who shall under the said executive-secretary be charged with organizing and directing the community center meetings and activities provided for in this section.

The distinguishing between the forum and the center does not imply separation, but proper coördination between the use of the building which is not under the direction of the board of education, but is properly an expression of citizenship-sovereignty, and its use for all other kinds of activities, in relation to which the board of education properly has administrative responsibility. In relation to the forum, the executive-secretary is an administrative *agent*, his only duty to the board of education being to make necessary reports, his obligation being to obey the wishes and serve the assembly of the adult organization, in relation to the community center activities, aside from those of the adult forum, he is a *director*. It is essential to consistent community organization that this distinction be clearly understood. There follows the provision for the remuneration of the executive-secretary and his assistants. This *per diem* arrangement is of course not so satisfactory as a salary adjustment, but its quotation here serves to show that the necessity for fixing responsibility for this public service by definite compensation is now fully recognized.

SEC. 5. That the executive-secretary authorized by this act for each public school building established and used as a community forum or as a community forum and community center under the provisions of this act shall be entitled to compensation at the rate of $4 for secretarial service rendered at and in connection with each meeting of such community forum and at the same rate for directoral service rendered at and in connection with each meeting of such community center, and the two assistants herein authorized for each building used as a community center shall receive for their services compensation at the rate of $2 for each meeting of such community center: Provided, That not more than $4 shall be paid any executive-secretary, and not more than

$2 shall be paid any assistant for services rendered under the provisions of this act in any one day, and that compensation shall be paid only for services actually rendered at and in connection with meetings of community forums and community centers.

There follows the provision for the paying of the expenses and compensations authorized. Here the important thing to be noted is that this expenditure is seen to be truly and properly public-educational and is to be made out of the public school funds.

It shall be the duty of the board of education to provide out of appropriations of public funds authorized for the public schools, light, heat, janitor service, and such other expenses as may be necessary to enable the comfortable and convenient use of public school buildings as community forums and community centers under the provisions of this act.

6. To Make a Beginning. Experience has shown that to assure permanency of community center development, it is necessary that these adequate provisions for this development be made by legal enactment. Thus the great object of study and effort, at the start and until it is attained, is to secure the proper recognition and establishment of the community center itself as more than a volunteer and temporary institution. To this end, of course, the best of all means is demonstration. To pay the expenses of this demonstration, private funds may be used, but it is most important that, excepting the assessments or collections of the forum meetings, all moneys that may be given, be paid over to the board of education to be administered through its regular channels of public employment and dispersal rather than paid directly by private contributors, whether individuals or associations. In a number of cases, following this plan, money has been put into the treasury of the board of education by private individuals to be used in paying the salary of a man or woman employed as associate of the superintendent of schools to assist the local principals or their deputies in demonstration development.

In this preliminary demonstration, it is obviously desirable to adhere as closely as possible to the systematic procedure outlined above. For instance, it is important that the beginning be made by a well-advertised community referendum. There are several instances of opposition to community center development which have been due entirely to the resentment caused by the fact that the adult citizens of the communities were not formally consulted and given opportunity to express their approval at the start. Whatever the situation, the first thing to be done is to secure the organization of the adult community forum.

7. The Forum Program. Dr. Samuel McChord Crothers of Cambridge was invited to address an assembly of neighbors in a schoolhouse community forum. He accepted the invitation, but failed to tell what his topic would be. When he came to speak he said: "It would seem as strange and unnatural to announce a topic for such a gathering as this, as it would be to fix and publish in advance what I and we are going to talk about when I come home to dinner." This is the ideal of the community forum — not stilted lectures and speeches cut and dried, but interchange of ideas with the natural freedom and courtesy of a household.

While the development, in which the forum program can be left to make itself, is far ahead of the community at the beginning of its organized expression, yet this ideal should be kept in mind. Parliamentary procedure should be adhered to, not for its own sake, but because this is the way to the freeing of speech in conference. A good way to prevent the discussions from getting into a rut is to devote successive meetings to local, state, national, and international questions — following the consideration of matters which belong to the neighborhood of the world by the discussion of those which belong to the world of the neighborhood, and so dealing in order with live problems that belong to these concentric spheres of interest and responsibility. "To understand and answer public *questions*"— that phrase tells how every topic should be presented. The forum is not the place simply to hear about things, but to solve problems. Every public question, whether of public health, condition of the streets or roads, parks, industrial conditions, newspaper service — all the way to the problems of international relationship is a matter, first of understanding, "What we have," and then determining, "What we want." So, the normal arrangement is to have each topic presented from the conservative point of view, that is, the view of the defender of things as they are, and also from the radical view of those who see improvements to be made. It goes without saying that, in the hearing of candidates for office, fair and equal opportunity should be given to all.

8. The Organization of the Young People. Some time ago, when I began to recognize the need of a recreation place, especially for young people, I thought of building a parish house in connection with my church. I then thought it would be more economical to unite forces with others in the building of a Y. M. C. A. Today I see that the money that a Y. M. C. A. would cost, would go many times farther and would benefit all the young people instead of only a few, if it were to be contributed through the regular channels of public educational coöperation and spent in securing equipment and supervision for the use of the schoolhouses and grounds, during the time they are now idle, for club activities and physical training. This is just as educational as the study of books. It is the proper business of the community.

This perception of a prominent clergyman in a middle-western town, is sure to come to the adult citizens of any community just as soon as they begin finding the possibility of using the public schoolhouse as their own headquarters of association. Moreover, the adult forum organization furnishes, not only the initiative but also the natural model and pattern for the organization of the young people. In the adult use of the schoolhouse, there may be any sort and every sort of subsidiary organization, which is approved by the committee-of-the-whole forum, such as, a camera club, a dramatic club, a Shakespeare club, and so on. In the same way, not only for gymnasium activities, but for other specialisms, the young men and the young women, and smaller special groups, may be formed, but, as with the adults, it is desirable that, first of all, the one organization of all the older youth of the community should be established as the effective means of a real civic apprenticeship.

9. The General Evening. As in the normal household, the responsible adults have their times of special counseling, so in the forum assembly in the community center; as in the normal household, the youth have their own occasions of separate interest, so properly in the community center — but, as in the normal household, there is also in the community center the time and the place for the gathering of the whole group together for those expressions and enjoyments that know no difference of years. It is in this communal gathering of the whole neighborhood family, with music by the community orchestra at its opening, and then a lecture or a play or motion pictures, followed by an hour's wholesome intercourse, with dancing or other form of free enjoyment, that the creative festival spirit that sings is born.

There is not a holiday in the calendar for the celebration of which this general community center gathering does not afford the most appropriate medium. The "community Christmas" belongs here, for what Christmas is among the days of the year, the schoolhouse is among the buildings in any community. So, here where past and future blend, where all are guests and all are hosts, New Year's finds its due observance. Here the patriotic days may, of course, be most worthily celebrated. Here even Hallowe'en yields its better meaning, and the original idea of Thanksgiving as a *community* festival is restored.

Of such a general evening in a community center, a visitor said:

> In the room were gathered the fathers, the mothers, the grandfathers, the grandmothers, the young men and the young women, and, oh, it was good to see. We had half an hour of song and a half hour of talk, and then we had some dancing and I saw the finest thing I have seen in years; the fathers danced with their daughters, the mothers grown young again danced with their sons. Weren't they happy? Indeed, they were. I saw a vision of the future, a vision with a promise. No one could come there and not be thrilled to higher endeavor, finer, stronger, and better effort, truer service and more unselfish love. It was, in very truth, "the place where everybody felt at home."

10. Program Material. Of the community center songs, the best that has been written is *The Forum*, by Justice Wendell Phillips Stafford of Washington. The words go well with the air of *Fling Out the Banner; Let it Float*, which is generally familiar. The other songs are appended as suggestions of the kind of songs which any community can write for its own use.

THE FORUM

Make wide the doorway of the school
Around whose sill the millions wait,—
The cradle of the common rule,
The forum of a stronger state.

Make broad the bar, and bid appear
The questions clamorous to be tried,
And let the final judges hear,
Themselves, the causes they decide.

Write bold the text for age to read
The lesson not discerned by youth;
And raise the altar of a creed
Whose only article is truth.

Though fair and dear the ancient mold
Wherein the burning thought was cast,
Pour not a New World's glowing gold
Into the patterns of the past.

Whatever channels lead apart
The currents of the lives of men,
The blood that left the Common Heart
Shall leap with common pulse again.

IT'S A SHORT WAY TO THE SCHOOLHOUSE

Air: *Tipperary*

To a Schoolhouse Center came a lonely man one night,
Saw the building filled with folks, the windows gleaming bright.
Sounded songs of neighbor-greeting, joys that all might share.
It burst the bands that bound his heart to find a Welcome there.

Chorus:

It's a short way to the Schoolhouse. It's a short way to come.
It's a short way to the Schoolhouse. There's one right near my home.
Then, Good-bye! Gloomy Evenings! Farewell! Lonesome Care!
It's a short, short distance to the Center, and I'll meet you there.

2

Th' lonely man bethought him of a lonely girl he knew,
Sat him down and wrote a note: "I have good news for you;
Move into this Neighborhood, for here's a trysting place —
A common ground, where bars are down, and folks meet face to face."

Chorus:

3

Th' girl who had been lonely wrote him back a glad reply:
"'Deed, I'll stay right where I am, and — if you'd have me nigh,
Your pal for jolly evenings, then I'll tell you what to do —
Just steer your car right over here — for we've a Center too."

Chorus:

NEIGHBORHOOD

For a recitation

I

The starting point of every good —
Of larger life — is Neighborhood.
It's fear-free banners now unfurled
Mean hope of peace to all the world.
If we can meet and join as one,
Here, from all lands beneath the sun,—
Then neighbor-nations too, shall — in our time —
Forge world-wide union in a bond sublime.

2

Then, in this sacred Common Place,
Which we have builded that the race
May nobler be in mind and heart,
We join that we may have our part
In Neighbor-Union without bound,
That, spreading all the earth around —
Seeking naught less than Mankind's Common Good —
At last, shall make the world one Neighborhood.

THE FELLOWSHIP OF FOLKS

(Air: "*Drink to Me Only With Thine Eyes*," Or: "*Auld Lang Syne.*")

1

Come close and let us wake the joy
  Our fathers used to know,
When to the little old schoolhouse
  Together they would go.
And neighbor's heart to neighbor warmed
  In thought for common good.
We'll strike that fine old chord again —
  A song of Neighborhood!

2

Out in the world we all have learned
  The strain of toil and care.
It's dimmed the visions of our youth,
  Of joys that all might share.
In thought for self, we've all but lost
  That youth-born faith in men.
Come 'neath this common roof, for here
  It kindles bright again.

3

The fathers clove the wilderness
  And made a clearing here,
Then, at its heart, this friendly roof
  They joined their hands to rear;
And here they met and talked and planned
  A larger common weal.
Their Future we are living now.
  We, here, their purpose feel.

4

That little old schoolhouse is gone.
  Its friendliness must stay.
The strength it gave our fathers' hearts
  Our own hearts need today.
Great is the task that 'waits our hands;
  The power of each is small.
Uniting in this Common Place
  Comes forth the might of all.

To serve thy generation, this thy fate:
"Written in water," swiftly fades thy name;
But he who loves his kind does, first and late,
A work too great for fame.
— Mary Clemmer.

Is true Freedom but to break
Fetters for your own dear sake,
And, with leathern hearts, forget
That we owe mankind a debt?
No! true freedom is to share
All the chains our brothers wear,
And, with heart and hand, to be
Earnest to make others free!
— Lowell.

CHAPTER FOUR

THRIFT

1. Meaning of Thrift. "Laying aside a few dollars each week does not necessarily make one a thrifty person. Thrift means so much more than merely saving money — it means personal efficiency — it means plans — it means self-control — it means foresight — it means prudence — it means sane and legitimate self-confidence — it means all that makes for character. It is as much removed from miserliness on the one hand as it is from extravagance on the other. As we build the ideals of thrift we build character."— S. W. Straus, President of The American Society for Thrift.

2. Necessity for Thrift. The United States is blessed with natural resources so varied and so abundant that until within the last few years the American people seemed to think that these resources were inexhaustible, and they wasted almost as much as they used. Finally the National Government came to realize that unless the waste of forests, mineral lands and water power were curtailed, these resources would soon be reduced below their capacity to supply the needs of the people, and the Conservation Movement was started. Since 1908 much has been done to prevent waste of our forests and mineral resources, and to prevent corporations from obtaining control of the most valuable water power on government lands. In its efforts to conserve these resources the National Government has been aided by the state governments, and now the nation is committed to the conservation of these great sources of wealth.

As a people we are improvident. Government statistics show that 98 per cent of the American people are living from day to day on their wages. To these people loss of employment would mean pauperism. Less than 6,000,000 out of 20,500,000 families own their homes. Sixty-six people out of every hundred who die in the United States leave no estate, and at sixty-five years of age, ninety-seven out of every one-hundred are partially or wholly dependent upon relatives, friends or public charity for their support. The country is wealthy, but the people are poor. Why? Because they have not practised thrift. If the future generations are to be in a better condition it will be because the children of today are taught to be thrifty. This teaching must fall largely to the public schools. So important does this work seem to some of the far-sighted business men of the country that in 1915 they organized the American Society for Thrift. The National Education Association the same year appointed a committee to make a thorough study of the best methods of teaching the subject.

Only a thrifty people can make a thrifty nation. A thrifty family is one in which the majority of members, at least, are thrifty; therefore, thrift is an individual matter, and this chapter is devoted to the consideration of the subject from the view-point of the individual.

3. Saving Money. Many people think that one cannot save on a small income, so never try. Such people fully believe that some time in the future, when their income is larger, they will begin to save; but by that time *they have formed the habit of spending*, and it is even more difficult for them to save on a larger income than it would have been at first.

In the beginning it is not so much the amount saved as the formation of the habit of saving that counts; therefore, everyone should save something from his income, be it no more than a dime or a penny. The teacher who can induce her pupils to save something from their allowances or their earnings is helping them to form a habit of untold value. We suggest the following plans:

(a) Motive. No one does anything deliberately without a motive, therefore every child should have a motive for saving money. Saving always requires the setting aside of an immediate for a remote good. Mary has a weekly allowance. She has been accustomed to spend ten cents for going to a moving picture show and fifteen cents for candy. At the end of the week she has no money and often has to go without something she really needs because she has no funds with which to purchase it. Talks on thrift, which include these expenditures by most of the pupils, will soon set them to thinking about the wisdom of saving a few cents each week from their income. Ask a few questions: "How many can remember how the candy they ate yesterday tasted? Did you feel any better after eating it? Did you then derive any permanent good from it? How many can remember anything of value that they saw in the moving picture show last week? Now is it not better to save a part of your money so that when you need something of real value you can purchase it? Remember that the immediate satisfaction of a desire seldom has any lasting effect. We often sacrifice a greater pleasure or good in gratifying our immediate desires. If you save only five cents a week, that will amount to two dollars and sixty cents in a year, and if you can save ten cents a week you will have five dollars and twenty cents at the end of the year. Now how many think they would like to begin saving?"

A few appeals will secure a number of pupils, so before the appeal is made the teacher should have her plans all laid. If in a graded school she will probably have no difficulty in arranging through the principal to start a savings-bank account for her room. Of course, before any plan of this sort is mentioned to the pupils, the consent of the board of education should be obtained.

In rural districts the problem is somewhat different. Few children living on a farm have stated allowances of spending money. They are more likely to be given a lamb, a pig or a calf, or to be promised a share of the income from some crop or from the poultry yard, provided they perform a certain amount of work or meet other requirements. This plan works well where the parents keep faith with the children, but it is to be regretted that in too many instances this is not done. The old maxim, "The boy's calf but the father's ox," has not yet lost its force, and many a boy has left the farm to seek what he thought would be more remunerative employment in the city, because his father did not keep faith with him. Corn, pig and canning clubs are now helping the boys and girls on the farms to earn money. Since most farmers are frugal it is easier for children on the farm to save money than it is for those in the city. In giving talks on saving money the teacher of a rural school should take these conditions under consideration.

(b) UNWISE PURCHASES. Few people are good buyers. In cities, many women are "bargain chasers." They often buy what they do not need because they believe that they are getting it "cheap," when, in most instances, they are paying a high price for an inferior article. Had these women been taught the principles of thrift when they were school girls most of them would stay away from the "bargain counters." An inferior article at a low price is often more expensive than a similar article of good quality at a somewhat higher price. Cheap clothing, cheap shoes, cheap jewelry and many other cheap articles are found in the homes of those who do not know how to buy.

Far removed from the "bargain chasers" are the extravagant buyers who pay more than is necessary for what they buy. Some of these are people of means and can pay the price without suffering any inconvenience; nevertheless, when anyone pays more for an article than it is worth, he is using money carelessly, for the excess could be put to a better use. But the worst effect of such purchases is in the influence they exert upon a large number of people whom they cause to live beyond their means. Mr. A has an income of $5,000 a year. He has two children who have received their education and are ready to enter business. He has never incurred any debts, and has several thousand dollars invested in good securities.

He buys an automobile for $1,500. Mr. B, a near neighbor, has an income of $2,000 a year. He has four children to educate and lives in a rented house. Because A bought an automobile, B must have one, so he buys one on the installment plan, paying a few dollars down and agreeing to pay a specified sum each month. B's family could not afford the automobile, and its purchase entailed upon the household a burden of debt that prevented them from buying many necessary things for more than two years. B represents a large class in both city and country. Many buy clothing they do not need, furniture they cannot afford, and luxuries that are unnecessary because they want to "keep up appearances." They constitute a large proportion of the 98 per cent who live from day to day on their wages and have nothing laid by for the future.

The teacher should impress upon her pupils the value of the following principles:

1. Never buy anything you do not need.

2. Never buy an article because it is "cheap."

3. The wisest purchases are those of serviceable articles at a fair price.

4. Tradesmen do not sell goods at a loss unless forced to do so under extraordinary circumstances. So-called "sales" at which merchandise is offered at "greatly reduced prices" are for the benefit of the tradesman, and not the purchasers. On general principles it is wise to keep away from such sales.

5. Persons of real worth do not "put on style" and live beyond their means to keep abreast of their neighbors.

4. Waste. The old adage, "A penny saved is as good as a penny earned," is still true. Not what we earn but what we save determines, in the long run, whether we are to be independent or poverty stricken. America is the most wasteful nation in the world, and this is because the citizens are wasteful. Nearly enough food is wasted every day to feed one-half the people of the country. Why? Chiefly because housewives and cooks do not know how to use portions of vegetables and meat, and because it is easier to throw them away than to learn how. Another reason is that more food is prepared than is necessary, and at least a portion of the surplus is wasted.

But little over one-half of the tillable land in the country is under cultivation, the balance being allowed to run to waste. Millions of feet of lumber are destroyed every year by forest fires, which proper care might prevent. Statistics tell us that the discarded cooking utensils, broken stoves and old tin cans and other material gathered off the dumps in large American cities in one year produced material worth $14,000,000.

These are some of the illustrations of waste on a large scale. How about waste caused by individuals? After one or two talks about the waste of material on a large scale, give one or two talks of a more local nature. Ask the pupils to look for waste in the home, in the community, in themselves. This will call attention to a grave fault common to almost every one. Attention being called to our wastefulness, ask the children to try to find the causes for it. As each cause is mentioned it should be discussed to determine whether or not the one mentioning it is right. Doubtless there will be two sides to most of these discussions, and wrong causes will be given, but out of these discussions will come ideas and resolutions of great value, if the discussions are entirely impersonal.

Now bring the matter home to the pupils. How many waste the school supplies furnished for their use? Do you use a piece of paper twice as large as you need to write a given exercise on? If so, you have wasted half the paper. Who is at fault, the pupil or the teacher? (This depends upon whether or not the teacher has seen that the paper is cut the right size for the exercise.) If pupils are left to their own devices, many of them will waste the paper. How many throw away their pencils before they are used up because they do not like to write with a short pencil? How many waste pens, ink, blotters and other supplies?

If pupils waste material belonging to the school they are likely to waste that belonging to themselves or their parents. How many have a work dress or a work suit to wear at home so as to save the dress or suit worn to school? How many girls ask for a new dress when they have several only slightly worn, some of which could readily be made over? How many boys buy new shoes when half-soling the old pair again would make them good for another three or six months? How many have more hats, caps and other articles of clothing than they need? How many have plots of ground about their homes not in use, on which vegetables or flowers might be raised?

These and other similar questions will arouse the pupils to a consideration of this great problem of waste, but the consideration will not be confined to the school. The pupils will talk about them at home and the entire community will become interested. When this stage is reached it is a good time to organize the school into a thrift club, which the parents should be invited to join. The chief purposes of this club should be:

(1) Saving money.

(2) Prevention of waste by the more careful consumption of material — food, clothing, fuel, etc.

(3) The study of economic conditions for the purpose of saving time and labor in the various occupations of the school and neighborhood.

Such an organization will not revolutionize the habits of a community in one term or one year, but it will unite the home and school in a more complete coöperation, and it will secure marked improvement in the economic affairs of the pupils and many of their parents.

Each pupil should be encouraged to keep an account of his savings, not only in money but in other matters, reckoning each saving at a fair cash value. The total amount of these savings at the end of a month will astonish both teacher and pupils. Tom Jones was going to buy a pair of shoes that would cost five dollars. He had his old ones half-soled for one dollar, and they would last three months. He saved at least half the price of the shoes, or two dollars and a half. Sarah Martin was about to get a new dress that would cost ten dollars. She had an old one made over, paying three dollars to the dressmaker and one dollar for trimmings, saving six dollars. These reports can be given to the teacher privately and the names withheld in making the report, if the pupils so desire, but the grand total should be given each month.

5. Saving Time. "Time is money." Yes, but it is more than money. It is the agency by which one can bring himself to any degree of perfection of which his talents are capable, or by which he can take himself to the lowest depths of degradation. Do your pupils spend twice as much time as is necessary in learning an arithmetic lesson? If so, half that time is wasted and the pupils are acquiring listless habits. You need to revise your program. How do your pupils spend their time out of school? How much is given to play? to helping at home? to reading and study? Make a canvass of your school to learn these facts, then give your pupils interesting talks on the value of time. You have already told them how a dime saved every day would in time lead them on to independence; so the minutes wisely used will enable them to become useful and honorable men and women. Cite such examples as Lincoln before the log fire, Watt studying the teakettle, Franklin in the printing office, Thomas A. Edison working days and nights together without sleep. These men attained to eminence because they made a wise use of their time.

Almost every community has its loafers. They gather at the village store or in some other center and spend much of their time in gossip. Boys who frequent such places seldom make successful men. Not only are these people wasting time that might be spent profitably, but they are contracting habits of idleness and filling their minds with vicious thoughts. Some organization should be formed among the boys that will keep them from gathering with loafers. Boy scouts, companies for military drill, clubs for carrying on, out of school, lines of work in which the members are especially interested, are all excellent for directing boys to something of lasting benefit.

While girls do not have as many temptations as boys, many of them waste hours every week in idle gossip or frivolous pastimes, and clubs for girls are equally necessary. Probably the best of all these organizations is the Camp Fire Girls. Cooking, canning and sewing clubs are also excellent.

Caution. We would not have the reader infer from what we have said in the foregoing paragraphs that we are opposed to play. Every child should spend a portion of each day in play. But here much time is wasted because the children do not know how to play. Watch the pupils of any school on the playground during recess and notice how many spend the time loitering or in playing in a half-hearted manner. The teacher should be able so to direct the play of her pupils that all will join heartily in some game during the play periods.

6. Improving One's Opportunities. The greatest opportunity that comes to every boy and girl is that of obtaining an education, yet many boys and girls fail to grasp the importance of this opportunity and leave it for another of far less value. That is, they leave school to go to work or for some other fancied gain, only to learn when it is too late that they made a very unwise choice. The question of leaving school is fully discussed in the chapter, *Vocational Guidance*, and we make only such reference to it here as is necessary to show that time spent in training the mind is of the greatest value. A person without at least a common school education is at a great disadvantage in any vocation because he has to compete with those who are educated. Sometimes it becomes necessary for a pupil to leave school before completing the work of the eighth grade. Such a boy or girl will have a hard struggle, but the case is not hopeless, for there are evening schools, correspondence schools and other aids through which these young people can carry on their studies; but of course their progress is much slower. It is therefore economy for pupils to remain in school as long as it is necessary to fit them for their chosen vocation.

Again, in choosing a position the young man or young woman should look to the future as well as the present. It often happens that a position with a lower salary at the beginning, but with good opportunities for advancement, is better than one with a higher salary and little or no opportunity for advancement. The thrifty person always considers the greater good, though it may be more remote. Boys and girls in their teens are not able to look very far into the future and they need good counsel when called upon to make choices that will have a far reaching effect.

7. Saving Health. A sickly child is always behind in his classes and irregular in his attendance at school. The man or woman in poor health seldom succeeds in business, because of competition with those who are in full vigor of body and mind. Thrift means saving health as well as saving money. In health-lessons in school, the economic value of health is too often overlooked. Under normal conditions the pupils should be in good health, but there are some who are frequently absent because of colds, headaches and other ills.

The teacher can do much to enable these pupils to overcome the disadvantage under which they labor, by private advice and suggestion. She can also aid all the pupils in maintaining a high standard of health by frequent talks upon such subjects as food, clothing, sleep and exposure. Many pupils, especially among the girls, become anaemic because of frequent eating of candy and other sweets between meals. This practice destroys their appetite for nourishing food and soon leads to a weakened condition of the system.

Again, lack of proper clothing is often a cause of ill health. Some pupils prefer fashionable to comfortable clothing. Low shoes, thin stockings and light underwear in winter are the cause of many a breakdown among girls. Boys can usually withstand the weather better than girls, but on the other hand, their style of dress gives them greater protection. Boys often play in the water, roll in the snow and in other ways contract colds. These matters should be fully discussed from the economic as well as the hygienic point of view. (See Chapter V, *Personal and Community Hygiene.*)

8. Thrift and Penuriousness. The thrifty man is one who saves his money, prevents waste in his business, lives economically, husbands his resources and uses his means so as to increase his wealth and at the same time benefit his fellowmen. He is not stingy, but careful; he will not help pauperize the unfortunate by lavish contribution for their support, but will help them to become self-supporting. He contributes to the support of those public institutions which are for the welfare of the community — the church, public amusements and the public library, unless it is supported by a special tax. He keeps his wealth at work, either by using it in his own business or loaning it to others on good security and at a fair rate of interest.

The penurious man possesses few, if any, of the above characteristics. He hoards his wealth so that neither he nor anyone else derives any benefit from it. He takes little or no interest in public affairs except to oppose measures which call for the expenditure of money, however worthy they may be. He never contributes to the support of public institutions nor assists the unfortunate to become self-supporting. Such a man is not thrifty; he is miserly. His wealth does neither himself nor his fellowmen any good. Were the world filled with men of this type there would be no progress.

Teach true thrift, that thrift which will make the pupils good citizens when they become men and women, the thrift described in the opening paragraph of this chapter.

9. Institutions For Saving. The chief institutions for caring for the savings of the people are savings banks, postal savings banks and school savings banks. The total deposits in the savings banks of the United States exceed $4,700,000,000. This does not include the deposits in postal savings banks or school savings banks. In addition to these institutions many small banks have savings departments and pay interest on savings accounts.

All these agencies are for the purpose of caring for the savings of their patrons. They loan the money deposited with them on good security and pay the depositors a part of the interest received, usually three per cent. Every boy and girl should be encouraged to open an account in some savings bank. The establishing of school savings banks in cities has led to the saving of hundreds of thousands of dollars, most of which would have been spent unwisely. While most of the school savings banks are found in the larger cities, some banker in almost any town will be glad to coöperate with the school authorities in encouraging the pupils to save money, and will arrange to receive their deposits. All that is needed is a principal or a teacher who will take the initiative.

10. Keeping Accounts. Many a business man has failed because he did not know whether he was making or losing money. "How much does it cost you to live a year? Reckoning your board at a fair price and adding to that what is expended upon you for clothing, books, pleasure and miscellaneous things, what do you cost your parents a year?" When this question is put to your pupils many of them will be astonished. They had never thought of such a thing! But it is well for them to think of it. The study of the problem thus set before them will make most of them more thoughtful about spending money. When their interest is secured, encourage each pupil to begin an account, placing on one side all the money received and the sources from which it was obtained, and on the other all the items paid out and the purpose for which each expenditure was made. It will require patience and perseverance to get some to keep their accounts from month to month; others will do it with but little oversight. The important thing is to lead the pupils *to form the habit of keeping a personal account*. When this habit is once formed the chances are that it will be continued through life. Such an account is of great assistance in apportioning our income and determining the amount that can be saved each week or month. It is a guide to economic living. Fixing this habit of keeping a personal account is one of the most important steps in teaching thrift.

11. Conclusion. Many of the lessons suggested may best be given incidentally, when the work in arithmetic, geography or some other branch naturally leads to the discussion of some of the points suggested. They should never be far-fetched nor be presented in such a manner as to lead the pupils to feel that they are being censured. On the contrary, they should be led to feel that these lessons are to help them to become successful men and women.

First, make out a definite budget of expenditures based on past experience, and thus force yourself to live within your income.

Second, save a little regularly. Make saving one of the items of your budget. Make the item large enough so the savings will amount to something, yet small enough that they can be kept up regularly.

Fourth, teach your children the value of a dollar and the value of saving in their early days. Let them acquire the thrift habit as they grow up.

Fifth, remember that saving and investment go hand in hand. Avoid speculation. Shun fluctuating stocks. Put your funds as they accumulate in safe bonds or mortgages.—S. W. Straus.

12. Aids for Teachers. *Stories of Thrift for Young Americans.* Pritchard and Turkington. Scribners, New York; Chicago.

Personal Problems of the Boy Who Works. Jenks. Association Press, New York.

Literature of the American Society for Thrift. This may be obtained free of charge. Address the Society, Straus Building, Chicago.

CHAPTER FIVE

PERSONAL AND COMMUNITY HYGIENE

GENERAL CONDITIONS

1. Interest in Public Health. Within the last few years there has been developed a wide-spread interest in public health. People are becoming informed about the causes of disease, and sanitation is receiving more attention than ever before. All cities and many townships have their boards of health. Medical inspection of pupils is now common in city school systems. Special efforts are being made to give the people a knowledge of the laws of health and the best of means for preventing disease.

Every teacher should be informed upon the subject of hygiene. In Vol. III, Chapter VII, *Sanitation and Hygiene*, we have discussed this subject so far as it relates to the daily routine of the schoolroom. In this chapter we wish to consider those measures which are of permanent value to the pupils and the community, and which are far-reaching in their effect.

2. Standard Set by the School. One of the most valuable services that the school can render the community is to maintain a high standard of hygiene. This is not only the privilege of the school; it is its duty, for the following reasons:

First, good health is the birthright of every child, and the school should maintain such conditions as will preserve this birthright.

Second, the school is expected to set an example which the patrons should feel it worth while to follow.

Third, because the community needs education in the principles and laws of hygiene. The country, of all places, should be the most free from disease, yet because of the violation of the rules of public health, sickness and death are often more prevalent than in large centers of population where these rules are strictly enforced. Many of these rural communities have low hygienic standards. Frequently families give little or no consideration to protecting from pollution water used for household purposes, or to the disposal of human and animal waste. Good authorities assert that sixty per cent of the wells in rural communities are polluted. Children grow up in the belief that earache, toothache. and numerous other ills are to be expected and endured as a part of their lot in life. Examination of the hygienic conditions of some communities has shown that fully eighty per cent of the children drink tea and coffee, and that more than twenty per cent have frequent headaches. Over 400,000 of the rural population of the United States die yearly from infectious diseases, and it is safe to say that a great majority of these deaths might be prevented by the observance of the laws of health.

"Public hygiene may be enforced, but personal and domestic hygiene must be taught. No law can compel citizens in times of epidemics of typhoid or cholera to boil their drinking water and cleanse food that is eaten without cooking, but persistent warnings from health authorities, public lectures, and literature from newspapers and physicians and periodical discussion will be of greatest service in combating the spread of disease."

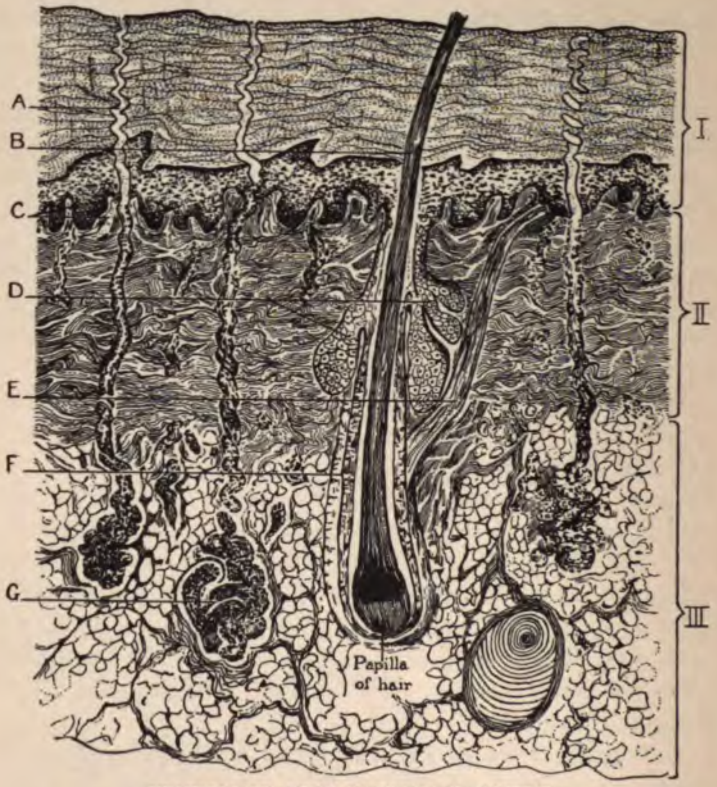
It may not be possible for the school to change the habits of living of the older members of the community, but it lies within the province of every school to establish among its pupils such standards of health as will lead the men and women of tomorrow to live under better hygienic laws.

"If it should ever come to pass that every pupil in the public schools should be brought naturally to a proper understanding of health and its relations to every other part of life and conduct such a chance for the advancement of the human race would be given as no considerable section of society has yet ever had."

3. Lesson Material. In selecting lesson material under each topic the teacher should be careful not to choose topics beyond the capacity of the class. To illustrate, the lessons on skin, food, breathing, etc., are suitable for all grades, but only the leading facts and laws should be dwelt upon in the intermediate grades, while a more comprehensive study should be given these subjects in the grammar grades. The cause and prevention of contagious diseases is a subject for the grammar grades, except that the general laws of health which indirectly touch upon this subject should be taught in all grades. In all cases make the lessons plain and practical. Let your teaching of these subjects be characterized by sound common sense. Avoid fads and fancies, and lead the pupils to look upon these lessons as something that will contribute to their welfare and the welfare of their homes, but avoid such presentation of subjects as may lead sensitive children to become morbid. Teach that health is the natural condition of life, and that if we live in accordance with natural laws we shall have health and happiness.

The topics here suggested should be considered when the regular work in physiology leads up to them. If there is no regular class in physiology in the grammar grades they should be given as special lessons. The subject is vital and should not be overlooked.

4. The Skin and Its Functions. Every text-book on physiology gives a description of the skin, therefore such a description is not necessary here. Everyone knows that the skin is a protecting organ, but only a few realize its value as an eliminating organ. The skin of an average sized person has an area of about seventeen square feet, and contains about two and a half million sweat glands. These glands are the outlet of a drainage system through which a large amount of waste matter is removed from the system, and when they fail to perform their full function the work is thrown upon the kidneys and other organs, often so overworking these organs that they become



SECTION OF SKIN, HIGHLY MAGNIFIED

I, Epidermis; II, dermis; III, underlying fatty tissue. A, duct of sweat gland; B, hair; C, papillae of dermis; D, oil glands; E, erector muscles of the hair; F, hair follicle; G, sweat gland.

inflamed and possibly diseased. The importance of the action of the sweat glands in the preservation of health should be explained and emphasized in the intermediate and grammar grades in connection with lessons on the care of the skin.

5. Care of the Skin. (a) CLEANLINESS. While at their play children become overheated and perspiration flows freely from the glands, appearing in the form of drops of salty water on the face, hands and body; but perspiration is in progress at all times, although it may not be sensible to the eye. When the waste matters are allowed to accumulate upon the skin, they become not only injurious to the person but offensive to his neighbors. Accordingly, a teacher not only has a right, but it is also her duty, to insist on bodily cleanliness on the part of all her pupils.

There should be in connection with every schoolroom a place where the pupils may wash and dry their faces and hands when they come in from their play, or to which may be sent any who are not fit associates for the others. In default of other arrangements, a simple washbowl and pitcher or pail, with a clean towel, will answer the purpose. From what has been said, however, it is evident that the dirt of the playground is less injurious and less offensive than that which accumulates through carelessness or neglect of parents at home.

(b) BATHING. In many of the better equipped schools of the cities there are now shower baths or tub baths which the pupils may use under certain restrictions, but in a majority of schools it is impossible for the teacher to require at school or even to compel at home that which she knows to be a necessity for the health of her pupils. However, a great deal may be done by general talks in her school or by kindly private interviews, if she is tactful and understands the situation.

Personal cleanliness demands at least one thorough bath in warm water each week, and this should be taken just before retiring time, or when the person can remain indoors quietly for an hour or so thereafter. Just before or just after a meal is not a proper time for such a bath.

There is no better tonic for the whole system than a cold bath, if taken under right conditions and at the right time, namely, in the morning, as soon as one rises from bed. It will not often be the case that pupils live so that they can take the cold-water plunge, and in many cases it seems almost impossible for them to get the proper cold bath in the morning; yet this is a thing worth advising and advocating, especially with boys and girls of the upper and intermediate grades. Besides stimulating the action of the skin and awakening the mind, it serves as a wonderful physical corrective for unwholesome tendencies that are apt to develop at the age of puberty.

If the home conditions are such that pupils cannot take a full cold bath, they very often can bathe the head, throat and chest in cold water every morning. They may not enjoy doing this at first, but after a time they will learn to enjoy its invigorating effects. This habit of bathing is especially valuable in the fall, winter and spring months, as its tendency is to prevent colds in the head, throat and lungs. If the children can be taught to take this bath and not unnecessarily to wrap up their throats and cover their ears, they can pass through the season almost wholly immune from colds. All cold baths should be followed by brisk rubbing with a towel to dry the skin and stimulate the circulation. If after that the skin is rubbed with the hands, it is even better and more invigorating.

Cautions. (1) That the most beneficial results may be obtained from a cold bath, one should leave the water while under the reaction that follows the sensation of cold caused by bringing the skin in contact with the water. If the bath is prolonged beyond this point one may be cold and chilly for hours.

(2) Delicate persons who have not been accustomed to cold baths may not be able to withstand at first a cold plunge or shower, or even a cold sponge over the entire

body. They should begin by bathing the head, neck and shoulders in cold water, and then extending the sponge to other parts of the body until they have become accustomed to it. In a few days they will be able to enjoy and find comfort in a cold sponge; and, later, a daily cold plunge.

6. Clothing. The clothing of children often is as unhygienic as it well can be, and the wise teacher will note faults and try to correct them whenever possible, always remembering that children and parents are often sensitive on the subject, particularly when there are any evidences of poverty or neglect. In every school the teacher will find in the winter months some children who really have not clothing sufficient to keep them warm, and if it is impossible to change this condition, she should favor these less fortunate pupils in the seating and in special care during inclement weather.

(a) CLOTHING FOR PROTECTION. The amount of clothing required in the schoolroom and that required out-of-doors will vary decidedly during the cold weather, and the teacher should be watchful that children take off in the schoolroom those wraps which they will need only out-of-doors. This is particularly true of waterproof clothing, rubbers and overshoes. These should always be removed as soon as the children come indoors and never worn during the session. Damp clothing is always more or less dangerous to anyone if worn during the session. It does not injure a person to get his clothes wet or to let them dry upon him if he is in active exercise, but to sit quietly in damp clothing is a very practical way of taking cold. The teacher will notice in wet weather and snowy times that the feet of some of the children are not properly protected, and will, if possible, give an opportunity to those whose shoes are worn or thin-soled to dry their feet. The teacher may remember, however, that the boys are fullblooded and lively and keep warm in their active games at recess and noon time, and that they are much less liable to feel changes in temperature than are the girls of the same age.

(b) CLEANLINESS. It is highly important that the clothing should be clean, and if it has been worn so long as to be offensive — and this is frequently the case — the teacher must interfere in the interests of her other pupils, if for no other reason, for dirty clothing, charged as it is with impurities of the body, is an ever-present force in vitiating the air.

(c) TIGHT CLOTHING. At no time of life is loose clothing more necessary, for not only do the body and limbs need every opportunity to move freely, but it is essential that circulation should be in no way impeded, if growth and development make their natural progress. It is sometimes almost impossible to make parents realize the dangerous effects of tight clothing. On the whole, they are more apt to dress boys properly than girls, because the more aggressive and active nature of the former compels some recognition of their right to physical freedom, while the idea that the girls must look well often results in such a style of dress that, perhaps without knowing the reason, they are made fretful, irritable and less able to meet the demands made upon them in this wonderful growing period.

(d) UNDERCLOTHING. For most people woolen underwear is the most desirable in temperate and cold climates. Wool is a poor conductor of heat, and prevents the escape of heat from the body, which is as necessary as the prevention of the access of cold air to the skin. Wool absorbs moisture readily and allows it to evaporate slowly. For these reasons woolens are well suited to the maintenance of an even temperature of the body. Wool, however, irritates the skin of some people and in such cases it is usually wise to find a substitute.

Cotton is a better conductor of heat than wool. It does not absorb moisture as readily and permits it to evaporate more quickly, consequently underwear made of ordinary cotton fabrics is not desirable; but when made of loosely woven or knit fabrics, cotton undergarments form an excellent substitute for those made of wool. Silk garments are excellent but too expensive for ordinary use, and linen is not suited to the maintenance of an even temperature.

In cold weather, undergarments should protect the extremities as well as the trunk. The practice of so clothing children as to leave the arms and legs without proper protection is not only cruel but dangerous, for undue exposure of the extremities is liable to cause disease of the vital organs.

(e) SHOES. Shoes with pointed toes and high heels should never be worn by children, and the majority of adults would be more comfortable if they avoided them. The sole of the shoe should be shaped to the foot, otherwise corns, bunions and other deformities of the feet soon appear to torment their possessor. Shoes which deform the feet are worn because of the dictates of fashion. Teach the children to regard questions of style from the view-point of health and good sense. It is better to be called "old-fashioned" for a season, if need be, than to be crippled for life.

7. Food. Food is required to furnish the growth and repair of the tissues, to produce heat and to furnish energy. Any substance which supplies the body with these needs without injury is a food. It is our purpose here to discuss a few vital facts and principles pertaining to foods and digestion which school physiologies touch upon but lightly.

8. Classification. Foods are classified into proteins, carbohydrates (starches), hydrocarbons (fats) and minerals. Each class has its part in nutrition, and an understanding of the contribution which each class of foods makes towards maintaining the human system in a normal condition of health and strength is of great value to everyone, consequently these facts should be emphasized in teaching physiology.

(a) PROTEINS. Proteins are the tissue-building foods and no other class of foods can take their place. Lean meat, the white of eggs, the casein of milk and the gluten of wheat flour are good illustrations. Beans, peas and other seeds of pod-bearing plants also contain protein. For this reason beans and peas have been styled the "lean meats of the vegetable kingdom."

STARCH GRAINS FROM POTATO, HIGHLY MAGNIFIED

(b) CARBOHYDRATES OR STARCHES. The starches constitute the largest proportion of our food. They are both heat and energy producers. Starches and sugars are usually classified together, because starch must be changed to sugar before it can be digested. Vegetables and cereals are the best representatives of this class of foods. Wheat is the most valuable of these, and wheat flour is used in the greatest variety of ways of any starch food. Rice is the principal starch food in the east and sugar is used more extensively in the United States than in any other country.

(c) HYDROCARBONS OR FATS. Butter, fat meat, oils and nuts are the best examples of this class of foods. They contain a large proportion of carbon, and their chief function is to supply the fuel necessary to the maintenance of bodily heat.

(d) MINERALS. Water and salt are the chief mineral foods, though small quantities of iron, phosphorus and some other minerals occur in the human system. About two-thirds of the body is water, and we need to take into the system two quarts of water a day to supply the demand caused by waste and the consumption of this fluid by the tissues and blood. With the exception of water, the minerals necessary are supplied through the foods eaten in an ordinary diet. Salt is usually added for flavor, and some authorities claim that the system would obtain enough salt without this addition. Be this as it may, it is doubtless true that many people eat more salt than the system normally requires.

9. The Balanced Ration. The system needs daily a certain quantity of each class of the foods described in the foregoing paragraphs, and the best state of health is maintained when the supply of each class just meets the demand. Extended experiments have been made to determine the proportions of protein, starch and fat which should enter into a well balanced ration.

The heat-producing value of a food is measured by the *calory*, which is the amount of heat required to raise the temperature of one pound of water four degrees Fahrenheit, or in metric measurements, the heat required to raise the temperature of one kilogram of water one degree Centigrade. Measured by this standard we find the following heat values for the various classes of food, one gram being taken as the unit:

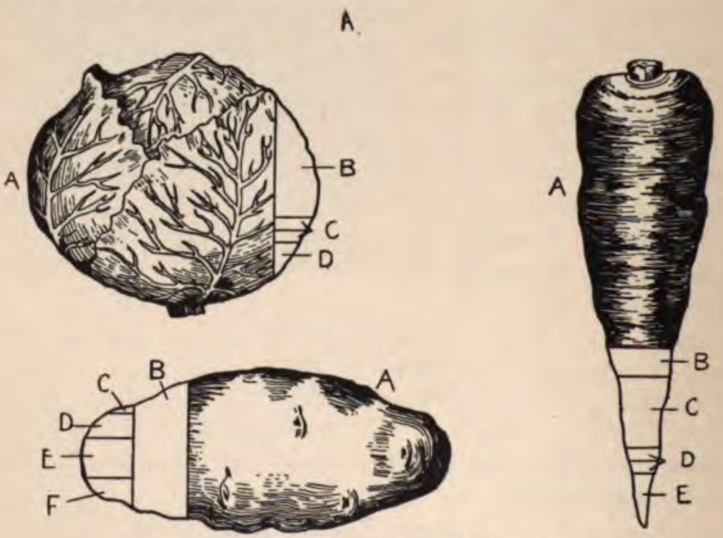
Protein,	4 calories
Starch,	4 calories
Fat,	9.1 calories

The combined results of all experiments show that the following proportions are best suited to the ration of the average individual:

Protein,	4 ounces
Fats,	2 ounces
Starches,	14 ounces
Water,	2 quarts

A deficiency of starch may be supplied by an excess of sugar, but we cannot replace protein by any other form of food stuff. One-fifth of lean beef is protein, therefore to obtain four ounces of protein from beef one must eat twenty ounces of beef. To obtain it from beans would require sixteen ounces of beans. A little over two ounces of fat meat and about seven ounces of wheat bread will supply the required quantity of fat and starch respectively.

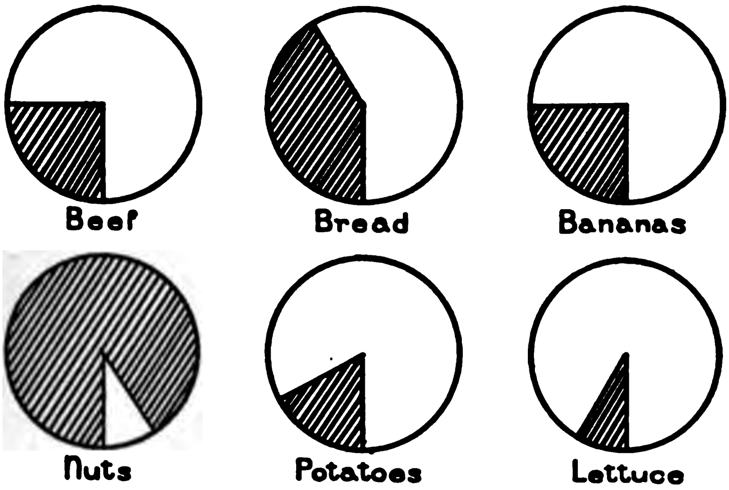
We can readily see that a ration composed partly of beef and partly of beans with the proper quantities of fat and starch food added is a more desirable ration than one containing either of these ingredients to the exclusion of the other. Those who understand the chemistry of foods and the daily requirements of the system so prepare their meals as to have them contain a pleasing variety of dishes, and at the same time provide the required amount of the different classes of food stuffs.



COMPOSITION OF POTATO, CABBAGE, CARROT
Potato: A, water; B, starch; C, fat; D, fibre; E, protein; F, ash.
Cabbage: A, water; B, starch; C, protein; D, ash.
Carrot: A, water; B, starch; C, sugar; D, protein; E, ash.

Caution. While the average ration here given furnishes a good foundation upon which to base a study of diet, we should remember that we cannot depend wholly upon averages. In all discussions of the problem of diet the individual should receive due consideration. A diet suited to *B* may not under the same conditions be equally suited to *C*. Faddists and reformers frequently overlook this important fact when arguing for the adoption of their plan by a family or a community.

This caution is not given for the purpose of deterring the teacher from entering upon a thorough discussion of the problem, but simply to call attention to an important fact that should not be overlooked. When one's system is in a normal condition the natural (not perverted) appetite is usually a safe guide to follow in choosing one's diet.



FOOD VALUES
The shaded portion indicates the amount of nourishment, the white portion indicates waste.

10. Relative Nutrition in Foods. There is much popular error in regard to the nutrition yielded by various articles of food. The food value of any substance depends not only upon the amount of nutriment it contains, but also upon its digestibility. Of two articles of food containing an equal quantity of protein that one which is the most completely digested yields the greatest quantity for nourishment. Fish is not so nutritious as meat and it is more difficult to digest. It is popularly considered a brain food because it contains phosphates, but there are more phosphates in meat than in fish, and more in grains than in meat. Only one-fifth of the potato is starch and nearly four-fifths are water. About nine-tenths of cabbage and carrots are water. The proportions of water in other vegetables are about the same. Beans and peas are valuable foods because they contain protein. Nuts are among the most valuable foods. A pound of pecan meats contains twice as much fat as a pound of ham, and the nuts are much more easily digested if they are properly masticated. Beef tea and the various extracts of beef on the market make palatable beverages, but they contain almost no nutrition. The diagrams show the relative amount of nutrition in a number of the most common articles of food. Every teacher should know and teach these facts since food sustains such a vital relation to health.

11. Digestion. A good digestion is essential to health. When the digestion becomes impaired all the other functions of the body are affected, therefore certain fundamental laws of digestion should be thoroughly taught. Among these are:

(a) MASTICATION. Rapid eating with its attendant lack of the proper mastication of food is a common fault of the American people. It is usually more noticeable among children than among adults. At the noon recess the children are so anxious to go out and play that unless restrained by the teacher they bolt their food. Digestion begins in the mouth with mastication and in salivation, but in most instances the work which the salivary glands and the teeth are designed to do is thrown upon the stomach. If the habit of thoroughly masticating the food can be established in childhood it is more than probable that it will continue through life. Providing warm lunches at school is an important step towards this end. But, even without this incentive, the teacher can do much by instruction and example towards establishing right habits of eating.

(b) Exercise. During digestion the stomach requires a large supply of blood, and anything which withdraws the blood from that organ interferes with its work. Violent exercises should not be taken just before or just after eating. This rule applies to mental as well as to physical exercise. Let the last period before the lunch hour be devoted to work which will not require the pupils' most strenuous effort, and after lunch encourage the children to engage for a short time in quiet games. Teach the necessity of following this rule through life if they would escape the serious consequences of indigestion.

(c) Fatigue. Fatigue of body or mind exerts a strong influence over digestion; one should not eat heartily when weary. A small quantity of nourishing food which is easily digested, however, is beneficial, since the nourishment supplied enables one rapidly to recover one's normal condition.

(d) Mental Condition. People who fret and worry and those who are habitually melancholy are, with rare exceptions, dispeptics. All care should be banished at meal time and the hour should be spent in cheerful, restful conversation. We frequently attribute a melancholy disposition to dispepsia, but in most cases we should be nearer right if we turned our statement about. Melancholy is more frequently the cause than the result of dispepsia. A cheerful disposition is essential to happiness, and the teacher should cultivate such a disposition and assist her pupils to do the same.

12. Condiments. Highly seasoned food not only perverts the taste but it also irritates the mucous membrane of the stomach and intestines. Thorough mastication develops flavors in common articles of food that those who bolt their food never dream of, and those who allow sufficient time for masticating their food seldom relish that which is highly seasoned. The body requires a certain amount of salt; a portion of this is supplied in the food itself, the remainder is added as seasoning and in most cases more salt is used in this way than is necessary to supply the needs of the system. Spices in any form should be used sparingly, if at all, and if people were guided by the natural demands of the body in selecting their food most of the manufacturers of sauces and other highly seasoned preparations would be compelled to go out of business by lack of patronage. Dr. Sadler in his *Science of Living* makes the following objections to the use of condiments:

1. Thorough mastication of the food yields natural food flavors and renders the use of condiments both unnecessary and undesirable.

2. Condiments pervert and blunt the sense of taste — Nature's monitor of digestion — the great regulator of metabolism.

3. They create an inflammatory thirst which water cannot quench. Alcohol is able to quench this inordinate and unnatural thirst at once. In many cases, condiments may be truthfully called the real ancestors of drunkenness.

4. They inflame and irritate the digestive mucous membranes. Mustard produces something like the same effect on the inside of the stomach that it does on the outside.

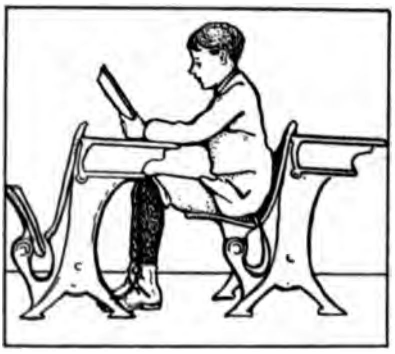
5. They all have a tendency to produce a catarrhal state of the stomach and bowels when their use is long continued.

6. While they may increase the quantity of the saliva and gastric juices, they invariably decrease the quality, as the fluids they produce are largely mucus, designed to protect the mucous membrane from irritation.

7. By over-flavoring, they lead in many cases to over-eating.

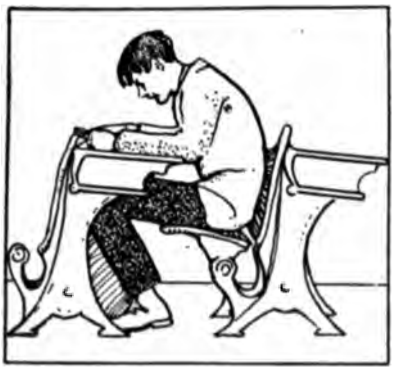
8. In general, it is a safe plan to avoid all flavoring substances which "taste hot when they are cold."

13. Breathing. Air should enter the lungs through the nasal passages, but every teacher will discover among her pupils one or more "mouth breathers." When these are discovered the teacher should as far as possible ascertain the cause and try to have it removed. Among the causes of mouth breathing are adenoids and other growths in the nostrils, and catarrhal affections. Unnatural growths can [illegible] emedied only by a surgical operation, and whenever this [illegible] ry parents should be urged to have it performed, [illegible] through the mouth endangers the health. [illegible] sease-bearing microbes enter the system in [illegible] through the mouth than through the nostrils. In cold weather the air taken into the lungs through the mouth reaches them at a lower temperature than when inhaled through the nose. Mouth breathing leads to tonsilitis, bronchitis, catarrh and sometimes to pneumonia. Moreover it affects the general health of the child and sadly interferes with his progress in school. Many pupils who were considered stupid have outdistanced their classmates when their adenoids were removed.



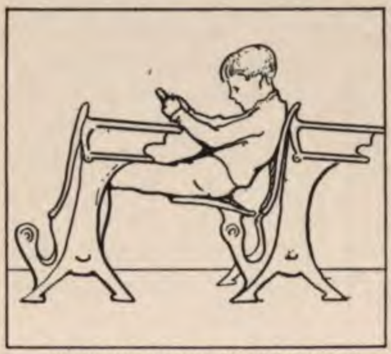
CORRECT POSITION

(a) POSTURE. An erect posture, both when sitting and standing, is essential to correct breathing. Children from ten to fifteen are liable to form slouchy habits of sitting and standing unless these are guarded against by their elders. The teacher should be constantly on the watch for these tendencies. When the pupil bends forward in his seat he prevents the full expansion of the chest and keeps the lungs from receiving their normal quantity of air at each inspiration. The accompanying illustrations show the correct position which the pupil should always maintain in his seat, also the position when the desk is too low. This position is unhygienic because it contracts the chest and restricts free breathing, and because it tends to make one stoop-shouldered. The third position is slouchy. It causes an unnatural strain on the spine and



DESK TOO LOW

prevents the pupil from doing his best work. This position is very common, especially among boys, and the teacher should watch for it and see that it is corrected. Train pupils to sit erect and to stand erect when reciting. By constant training they will make these postures habitual.



SLIPPED DOWN IN THE SEAT

(b) CLOTHING. Any stricture of the waist which prevents the free action of the intercostal muscles and the diaphragm prevents the normal quantity of air from entering the lungs. Since this quantity of air is necessary for purifying the blood these strictures are injurious to the system. Clothing should be suspended from the shoulders and not from the hips if proper respiration is to be maintained. Sometimes a few hints accompanied by explanations on the part of the teacher will secure needed reforms in this matter.

(c) BREATHING EXERCISES. At least one breathing exercise should be given during each forenoon and afternoon session. Open the windows, have the pupils stand in the aisles with hands at the side. Inhale slowly, raising the arms in front to a horizontal position and rising on the toes; exhale slowly, resuming former position. Repeat the exercise four or five times. The last time exhale quickly. This exercise allows the pupils relief from a sitting position, fills the lungs with fresh air and sends the blood through the veins and arteries with renewed vigor. It need not occupy more than three minutes, and the pupils will work enough more rapidly to more than make up for it. (See Volume III, page 274, *Physical Exercises.*)

(d) COLDS. The chief causes of colds are over-heated rooms, too much clothing, breathing impure air, and general debility. Lack of sufficient clothing, undue exposure and a sudden drop in temperature are occasional causes. The old adage "An ounce of prevention is better than a pound of cure," is particularly applicable to colds. People who live in the open or in well-ventilated houses and keep the body in a vigorous condition are seldom afflicted with colds. Cold baths are one of the best preventives and those who take a cold bath daily are practically "cold proof." Teach the pupils the causes of colds and how to avoid taking cold.

14. Brain and Nerves. The nervous system is the channel of communication between man and his maker. The brain is the citadel of will, reason, judgment and choice; it is the sanctuary of the moral nature, the dwelling-place of the conscience and the abode of the spiritual emotions.— Sadler.

The nervous system is the most delicate and complex structure in the body, likewise it is the most sensitive to external influences. Stimulants, narcotics and drugs of any sort show their effect upon the nerves sooner than any other tissues. Nervous tissue changes more slowly than the other tissues. It can and usually does withstand an abnormal strain from overwork or even disease for a long time, but when it breaks down an equally long time is required to restore it to its normal condition. For these reasons the health of the nervous system should be carefully guarded. Irreparable injuries are often wrought through ignorance which the lessons on hygiene in the school should overcome. The following essentials should receive careful attention:

(a) PURE BLOOD. The brain and nerves require a larger supply of blood for their nourishment than any other organs in the system. If for any reason the supply is diminished or the quality of the blood is impaired, the nervous system suffers from lack of nourishment. Anything therefore, which affects the blood affects the nervous system. Nutritious food, perfect digestion, fresh air, deep breathing are all necessary to the health of brain and nerves. We see, therefore, that we are indirectly contributing to the health of the nervous system by all that we do to keep the body in a vigorous condition.

(b) PHYSICAL EXERCISE. Physical exercise is necessary not only because it invigorates the system as a whole, but also because it affords mental diversion, which is a rest for those parts of the brain that become fatigued by continuous mental labor. The old adage, "All work and no play makes Jack a dull boy," is physiologically as well as philosophically sound. In our chapters on *School Management* in Vol. III, we have spoken of the value of play, and in Vol. III, Chapter XI, we give directions for systematic physical exercises, all of which are valuable in providing the necessary exercise and recreation for the pupils.

(c) MENTAL EXERCISE. The brain, like all other organs, gains strength by exercise. What sort of mental exercises should receive special attention in the different grades and those that should be touched upon lightly are carefully set forth in this volume in the chapter on *Psychology* by Dr. Bagley. That chapter should be read in connection with this topic, since following the directions there given may save the teacher from attempting lines of work for which the pupils are not prepared.

Children seldom suffer a nervous breakdown from school work. When such a misfortune befalls a pupil it can usually be traced to other sources. The school work, under those conditions, may contribute to the breakdown, but without the other causes it would not have produced any harmful effect. Children's minds are active and the right sort of mental work is highly beneficial during the school period of life. Children below the grammar grades should not be expected to study out of school hours, and the outside work required of those in the seventh and eighth grades should not exceed one hour per day. Children are not liable to suffer from overwork so much as from the wrong kind of work. To illustrate, the study of formal grammar in an intermediate grade leads to discontent and worry on the part of the pupils because it calls for the exercise of reasoning powers which the pupils of this grade do not yet possess. Educational misfits are the cause of much nervous irritation among school children, and this is a strong argument for requiring a thorough knowledge of child psychology as an essential part of every teacher's preparation.

(d) EXCITEMENT. During childhood the will has only slight control over the emotions and all children are easily excited. Enthusiasm is desirable, but undue excitement should be avoided since it is accompanied by a large expenditure of nervous energy. Those children who are specially sensitive should be watched, since they are more easily excited than the others. Strenuous games and vivid descriptions may injure rather than benefit such children, and it is usually wise to discourage their taking part in the games and to excuse them from giving such descriptions. Under the right sort of encouragement and guidance sensitive children will, in a great measure, overcome this condition. Moreover, the wise teacher will exert her utmost influence to sooth angry passions and to allay strife, not by punishment but by leading her pupils to fix their attention upon better things. Undue excitement irritates the nerves and should be avoided.

(e) SLEEP. Sleep is the great restorer of the nervous system. We become drowsy because we have drawn upon our nervous energy to such an extent that a new supply is needed, and when the warning comes it should be heeded. Children require more sleep than most adults and it is unwise to deprive them of the amount which Nature demands. "Early to bed" is a good maxim for children, but "early to rise" is not always so. Most children of school age require at least nine hours sleep, though some may not need more than eight hours. The average amount of sleep for adults is eight hours, some require more and some require seven hours or even less. It is an error to suppose that time spent in sleep is wasted, for during sleep the brain and nerves gather the store of energy essential to clear thinking and accurate movement. Without the necessary amount of sleep one's work is seldom satisfactory. Moreover, the lack of proper rest causes the individual to become irritable and disagreeable. The teacher who fails to secure her requisite amount of sleep is seldom successful. She is liable to be the chief source of disorder in her schoolroom, and inability to think clearly makes her work in the recitation uninteresting to the pupils and unsatisfactory to the patrons.

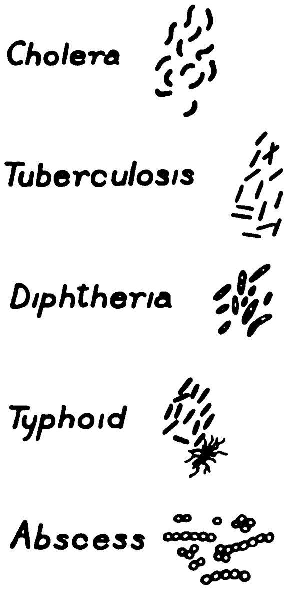
DISEASE AND ITS PREVENTION

15. What Disease Is. When any organ in the body fails to perform its function we speak of the condition as sickness or disease. Most of our common ills, such as indigestion, headache, colds, sore throat and the like are caused by eating too much, eating indigestible food, breathing impure air and exposure. The body will usually cure itself of these ills if the person removes the cause and remains quiet for a day or two. There are other diseases, however, of a more serious nature that are caused by the introduction into the system of certain germs, whose growth affects the functions of certain organs and also produces poisons medically known as *toxins*. Practically all germ diseases are infectious and the teacher should know how they are caused and how they may be prevented.

16. Bacteria. The air we breathe, the water we drink and the food we eat contain myriads of minute organisms known as *bacteria*. They are so small that they cannot be seen except under a microscope that magnifies 600 or 1000 diameters, and even then some of them appear as tiny spots. Some are plants and some are animals. Most bacteria are beneficial and we could not live without them. Those which contribute to our welfare feed upon dead matter and destroy it. Without them the earth would be so filled with the accumulation of dead plants and animals that there would be little or no room for living things. These bacteria sour milk, cause fermentation, give flavor to butter and cheese, prepare the soil for the growth of plants and do many other things that contribute to our welfare.

BACTERIA FROM SCRAPINGS FROM THE TEETH

But there are other sorts of bacteria that are injurious and their presence in the system is liable to cause disease. These bacteria feed upon living matter which they destroy. In their process of growth and decay they produce the poisons mentioned above. These poisons are absorbed into the blood and when they exceed the quantity that the blood can neutralize, disease follows. Disease-producing bacteria take several forms and each form has a specific name. The rod-shaped are known as *bacilli*; those which are curved or spiral, *spirilli*; those that are spherical, *cocci* or *micrococci*. Some have minute slender hairs attached to them, and the motion of these hairs moves the organism through the fluid in which it lives.



BACTERIA

The effects of disease-producing bacteria may be divided into three classes, as follows:

(1) Local effect upon tissues, as in the growth of the membrane in the throat in diphtheria, and the formation of ulcers in the intestinal canal in typhoid fever.

(2) Mechanical, as in the stoppage of a blood vessel by the ac-

cumulation of bacteria at some point. This may occur in cases where the valves of the heart are infected. Small masses of the bacteria slough off into the blood and are carried by the circulation to a small blood vessel through which they are unable to pass. A new infectious growth is started at this point which may result in an abscess.

(3) Poisoning; the growth of bacteria develops poisons which attack the tissues and greatly impair their functions or destroy them altogether.

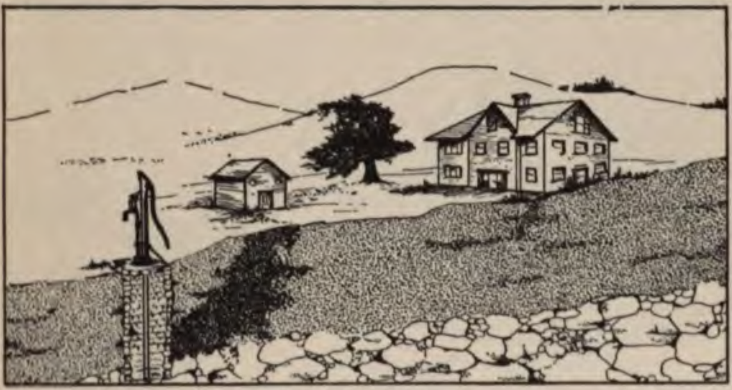
17. Infectious Diseases. Scarlet fever, small pox, diphtheria, measles, mumps and a number of other diseases are said to be "catching" because those coming into the presence of a person suffering from one of these diseases is liable to become infected with it. The infection is caused by taking into the system germs given off by the one who is ill. These germs may be given off by the breath, as in diphtheria and tonsilitis; through discharges from the mouth and nostrils, as in sneezing, coughing and spitting; through discharges from the bowels, as in typhoid fever, by pus discharged from ulcers, by actual contact with the sick person and by flies and mosquitoes. Epidemics of diphtheria, scarlet fever and measles, so common among children, are caused by the conveyance of the disease germs from one home to another throughout the community. Rural communities seldom understand how infectious diseases are caused, and, consequently, do not know how to prevent them. Such knowledge is invaluable to any community and the facts pertaining to infectious diseases should be so strongly presented to the pupils of every rural school that they will be influenced through life by this teaching.

18. Prevention of Infectious Diseases. A knowledge of the causes of infectious diseases is the first essential to the prevention of an epidemic, and good health is the first essential to their prevention by the individual. The facts here presented will serve as guides in teaching this subject.

(a) HOW BACTERIA ENTER THE SYSTEM. Disease germs enter the system through the mouth into the alimentary canal, through the mouth and nostrils into the lungs and through breaks in the skin into the blood.

(b) Sources of Bacteria. Impure air, water and dust are the principal sources of bacteria which enter the system.

Water. Germs of typhoid fever and diphtheria are found in large numbers in water polluted by decaying animal and vegetable matter, or by animal and human waste. Rivers into which sewage empties carry these germs long distances, and towns using the water are subject to frequent outbreaks of these diseases.



WELL POLLUTION

Many farm wells are so located that water seeping through layers of sand and gravel polluted by drainage from barnyards and outhouses enters them. The water from such wells is often a prolific source of typhoid and diphtheria. Some springs are polluted in a similar manner and when there is reason for suspecting the purity of water it should be subjected to chemical analysis, which will be made free of charge by the agricultural experiment station of the state or by the Board of Health. As long as the water is under suspicion it should be boiled since boiling will kill all germs that it may contain. One should not be deceived by the appearance of water since the most sparkling water may be the most dangerous.

Air. Impure air, especially air that has been breathed over several times is filled with disease-bearing germs, most of which cause diseases of the air passages and lungs, such as colds, tonsilitis and sore throat. Rooms occupied by audiences should be thoroughly ventilated before they are occupied again. The doors and windows of the schoolroom should be thrown open every night and left open until the air has been entirely changed. Sleeping and living rooms should be similarly ventilated every day.

Dust. Dust is one of the most prolific sources of disease germs. The dust which accumulates in dwellings, assembly halls, churches, schoolrooms and all other enclosures occupied by any number of people contains bacteria that have been expelled by the breath, and millions of particles of decaying organic matter. No one can breathe air filled with this dust without inhaling these germs. Sweeping with a common broom should be avoided whenever possible, and if the broom must be used some means for preventing the dust from rising should be employed. Walls, floors and furniture should be kept free from dust, which should be removed with a damp cloth. Any implement, such as the feather duster, which removes dust from one place merely to let it settle in another, should not be used.

WELL PROPERLY LOCATED

(c) RESISTANCE OF THE BODY. In state of health, the human body is able to fight disease-bearing bacteria and in most cases to destroy them before they produce any injurious effect. The best way therefore to protect oneself is to keep in robust health, but this will not wholly protect one against taking some of these diseases. It is, therefore, wise to keep away from one suffering from a contagious disease, but this cannot always be done, owing to one's duty to the sick.

(d) PURE BLOOD. One of the chief functions of the white corpuscles in the blood is to destroy disease germs. Whenever an injury occurs to the skin, an extraordinary supply of these corpuscles is rushed to the injured part by the blood and they surround the germs that get into the wound. This is the chief cause of the swelling accompanying a bruise or other injury. The corpuscles themselves are killed in destroying the germs, and sometimes there is such an accumulation of dead white corpuscles as to form an ulcer, or boil. These corpuscles attack the germs in the blood in the same way and destroy them. So long as the blood has an ample supply of white corpuscles one is practically safe from attacks by disease-producing bacteria. Whatever reduces the number or weakens the vitality of the white corpuscles weakens one's power of resistance to germ diseases, therefore great care should be taken to keep the blood in a healthy condition. Anything that injures the blood increases one's liability to disease.

(e) QUARANTINE. The only way to prevent an epidemic is to prevent the spreading of the germs causing the disease. All communities have laws for this purpose, but outside of cities these laws are seldom rigorously enforced, and this is the chief reason for epidemics in rural communities. One ill with a contagious disease should be kept in a room from which all except those who nurse the patient should be excluded. Moreover, the family should be quarantined, that is, the members should be required to remain on the premises and visitors should be excluded until danger of spreading the disease is passed. This may work some hardship to the family, but it is far better that a few be inconvenienced than that an entire community suffer.

Every teacher has a duty to perform in reference to contagious diseases. She may not be able to detect measles, scarlet fever and diphtheria in their first stages, but she will always be on the safe side if she sends home a child who has a headache and sore throat accompanied by more or less fever. A note should also be sent stating the reason for sending the child home, and requesting the parents to allow the child to stay at home until they know the nature of the illness. Children who have been out of school on account of any of these diseases should not be readmitted unless they bring a certificate from the attending physician, stating that they have fully recovered. Sometimes parents feel that these regulations are unnecessary and will try to force the teacher to readmit a pupil without a physician's certificate. In such cases the teacher should realize that she is responsible for the protection of all the pupils under her charge and that it is her duty to require the certificate. A careful explanation of her position will usually cause the parents to realize her position. This rule should be rigidly enforced. A single pupil recovering from scarlet fever and returning to school before the scales have ceased to come off the skin may transmit the disease to the entire school, since these scales contain the germs that produce the disease.

19. Suggestions and Precautions. We have dwelt upon facts pertaining to health and disease with which every one should become familiar, but in presenting these facts to children the teacher should remember that during the school period of life the feelings are stronger than the will and that imagination is not always curbed by reason. The facts should be presented in such a way as to enable the pupils to grasp them at their true value and at the same time to realize that healthy living enables one to escape most of the ills which befall those who live carelessly.

(a) BEWARE OF MEDICINES. The body is so constituted that under hygienic living it will take care of most of its ills. Medicines do not and cannot cure disease, "the most they can do is to aid the body to right itself." Medicines should not be used except under the direction of a physician. The law known as the "Harrison Act" has driven from the market many harmful preparations that were formerly sold in large quantities, but there is danger still of harmful drugs being procured and used. Educate the pupils away from them.

If people used fewer drugs and more common sense, took less medicine and more exercise, wore fewer wraps in winter and spent more time out-of-doors, we should hear less about sickness, and the whole race would be more robust." [1]

(b) SIMPLE RULES. The following rules taken from Conn's *Physiology and Hygiene* should be practised in every school and home.

(1) Do not spit on the floor or sidewalk.

(2) Do not put pencils or penholders in the mouth.

(3) Do not put the fingers in the mouth.

(4) Do not put money in the mouth.

(5) Never put into the mouth anything that another person has had in his mouth (gum, bean-blowers, whistles, drinking cups, etc.).

(6) When coughing, turn the face away from others, and avoid allowing others to cough in your face.

(7) Wash the hands and face often.

20. Stimulants and Narcotics. A knowledge of and belief in the principles of hygiene should exert a stronger influence against the use of alcoholic liquors, tobacco and drugs than will any direct teaching of the effects of these substances upon the digestive organs and the nervous system. Nevertheless we wish to call attention to a few facts and superstitions concerning them.

(a) ALCOHOL. Regardless of the fact that for years the effects of alcohol have been diligently taught in the schools.

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[1] Conn. *Physiology and Hygiene*.

many people entertain beliefs concerning its effects upon the human system which scientific research has disproved. Among these beliefs are:

(1) That alcohol is food. The most careful experiments show that under no conditions does alcohol serve to nourish the system. On the contrary, except in very small quantities, it interferes with digestion and thus prevents the system from obtaining the nourishment it would naturally derive from the food ordinarily eaten.

(2) That alcohol gives one strength. Alcohol is no more a source of strength to a man than is a whip to a horse or goad to an ox. It is an agent for taking from a man strength already stored in his system without supplying anything in its place. Over-exertion under the stimulus of alcohol leads to a weakened condition of the system from which it may require hours or even days to recover.

(3) That alcohol is a preventive of disease. This error is accepted by a large number of people and these same people believe that any substance having a biting taste or a pungent odor will accomplish the same purpose. We have already shown that good health and pure blood are the best preventives of disease. Since alcohol impairs the use of the digestive organs and injures the blood it renders the system subject to disease. Moreover it is the direct cause of several diseases of the liver, stomach and intestines.

(4) That alcohol increases the temperature. When alcohol is first taken into the system it spurs the heart to a more rapid action than is natural, and an extra supply of blood is forced into the capillaries of the skin, causing a momentary flush, accompanied by a feeling of warmth. The reaction that follows, however, reduces the temperature of the body below the normal. Those addicted to the use of alcohol cannot withstand cold as well as those who are free from its effects, and its use by members of exploring parties in the polar regions is invariably fatal.

(5) That moderate use will not become a habit. This is ·'e most fatal error of all. The human body is so consti-

tuted that taking into it any substance which is not a food, and which injures the blood, creates an appetite that grows with the use of the substance. Says an eminent English authority, "*The most dangerous effect of alcohol upon the body as a whole is that it has the power to create an almost irresistable appetite for more.*" There is no exception to this rule.

(b) TOBACCO. Tobacco is especially injurious to growing boys. It weakens the blood, arrests the development of the nervous system and prevents attainment to the highest intellectual power of which the user might otherwise be capable. Moreover it injures the throat and lungs and affects the action of the heart.

The law of habit is just as sure in connection with the use of tobacco as in the use of alcohol. The use of tobacco among men is so prevalent that the teacher has a difficult task to prevent the boys from contracting the habit. Probably nine boys out of ten who learn to smoke begin because they think that smoking is "manly." The teacher who can disabuse the minds of her boys of this idea will accomplish much towards preventing the use of tobacco.

(c) DRUGS. The drug habit is formed in so many ways that one should be constantly on guard against it. No one intends to become addicted to the use of opium, cocaine or any of the numerous drugs that produce, when taken, a soothing effect, but many acquire the habit unknowingly by the use of mild preparations containing these drugs. The effect of all such preparations, as well as that of numerous soda fountain beverages should be explained, and a sentiment against their use created.

21. Mental States. The intimate relation of mind and body causes our mental states to exert a strong influence over our health. Mental idleness, fear, fretting, self-consciousness and worry are the causes of many ills. On the other hand a serene temperament in which the emotions are under the control of the will, contentment and a tendency to look upon the pleasant aspects of life are conducive to health and long life.

Keep the mind peaceful and the conscience clear. All phases of fear as well as all passionate emotions in which fear is a factor, such as anxiety, envy, jealousy, grief, worry, hatred, despondency, revenge, remorse, etc.—all directly and powerfully influence the physical health through their depressing effect, primarily upon the cerebro-spinal nervous system, and reflexly upon the sympathetic nervous system.—*Sadler*.

CHAPTER SIX

PHYSICAL EDUCATION AND HYGIENE

GRADES FIFTH TO NINTH, INCLUSIVE

By E. GEORGE PAYNE, PH.D., and
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Harris Teachers College, Saint Louis, Missouri

1. **Connection with Previous Chapters.** Teachers who approach this chapter should read carefully chapters eight to eleven, inclusive, in Volume Three of this set of books. In these chapters is presented the theory and method involved in the successful operation of such a course in physical education as set forth in the following pages. Chapter Eight gives the modern viewpoint of education and points out the general conditions and aims that the teacher must keep in view if she is to realize the purpose for which communities maintain schools and provide education for childhood. Chapter Nine is necessary for a proper perspective, for in this chapter the teacher discovers the specific objectives of physical education, and unless she keeps them constantly before her she becomes merely a machine grinding out so much educational pabulum. To be intelligent in an educational endeavor requires the teacher to know not only in general what she is trying to accomplish, but to keep constantly in her mind at each point the specific thing she aims to achieve. Therefore a careful reading of Chapter Nine of Volume Three is indispensable here. The teacher should also read Chapter Ten and Chapter Ten, Continued, for many of the suggestions there are valuable for the later grades.

2. Physical Activity Fundamental to Welfare. We find it necessary at this point to remind teachers that physical activity, mainly in the form of play, is fundamental to the welfare of the race, the nation and the individual. The notion common in many communities yet is that the school exists for the purpose of teaching children from books, and that the most important things to be taught are reading, spelling, writing and arithmetic. We see most other activities commonly referred to by public speakers, the press, some schoolboard members, and even unprogressive teachers, as "fads and frills." The fact is, however, that the most fundamental thing about the human race is its physical activities, and the only method by which the child can gain experiences is through its physical activities. Reading may serve to organize and classify one's experiences, but unless he has first acquired them in some active relation in life, reading is meaningless.

3. Play, a Human Instinct. The play activity is fundamental to child development, because it lies at the very basis of human nature; it is an instinct. The play tendency in the child is an inner urge developed there through the thousands of years of its racial ancestry. The importance of play activity may be indicated by two references common to every one's knowledge and experience: First, every teacher has noted how children after a few minutes of vigorous play return to their work with new zest and fervor, and they learn much more effectively than they did before the exercise. This is due to the fact that the play gave an opportunity to express themselves, and therefore served as a means of recreation. Second, historians have pointed out that nations which have developed a high degree of skill in play have stood out preëminently as intellectual leaders in all past times. Greece is one of the most conspicuous examples in which all of the youth was taught to play as a part of its educational activities.

Civic authorities, moreover, have come to recognize the value of play activity, and practically every municipality, large or small, seeks to provide opportunity for its childhood to play. Tennis courts, ball grounds, race tracks, etc., are provided not only as a part of school activities, but as a part of the municipal activities in most communities, because of the fact that play is not only necessary for recreation, but for education and for physical development, as well.

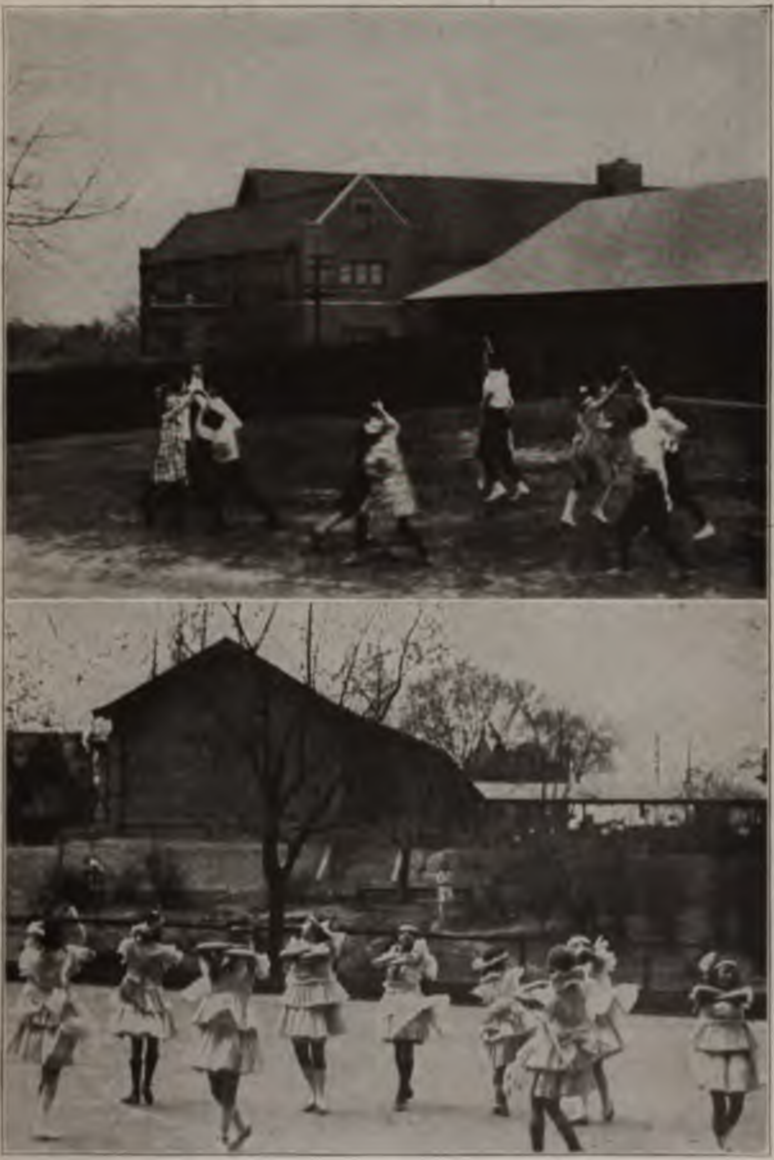
4. Plays and Games, like Arithmetic, Must Be Taught. It is commonly thought that children need no help or instruction to cause them to play with the greatest educational advantage. Play of the wrong kind may result in physical and mental injury, instead of advantage. Therefore it is necessary for educators to select the physical activities in which school children are to engage with as much intelligence as they use in the selection of literature, the problems in arithmetic or the material for drawing. For the reason, then, that physical activities have such a vital part in the mental and physical development of children, and because of the necessity of careful selection in order to produce the best educative effect, we have presented in detail a large number of games and physical exercises. It is necessary for the teacher, in the first place, to become interested and acquire for herself some degree of skill in these activities, and then she must teach them with as much seriousness and fervor as she would arithmetic, if she attains the desired educative results; results that cannot be attained through any other endeavors.

FIFTH AND SIXTH GRADES

5. Objectives. In the program of physical education and hygiene for the lower grades we have stated that our objectives are the development of social qualities, health knowledge and practices, recreation tastes and habits, and the correction of certain physical defects. The objectives in the upper grades are identical, but here they are realized by a gradually increasing consciousness on the part of the children of the nature of the objectives and their significance. This means that we must provide an opportunity to enlist more conscious self-direction and coöperation in the accomplishment of the purposes. Children with a natural capacity for leadership may be encouraged and directed in such a way that they will lend their efforts whole-heartedly to the development of the best kinds of group activities. Other children may be led to develop a loyalty to the right kind of leaders and principles, so that they will be a worth-while force in their communities. Ideals of healthy womanhood and manhood, involving erect posture and carriage, freedom from disease, personal and community cleanliness, suitable clothing, healthful forms of recreation, nutritious diet and taste for pure air may be formed by providing the right kind of situations and helping the children to practice the right habits in these situations. The correction of certain physical defects may be hastened by awakening an interest and desire on the part of the child to attain a standard of physical perfection which will help him to accomplish some good which he desires, as, for instance, the winning of honors for physical achievement.

6. Development of the Club Organization as a Means for Realizing Objectives. In the lower grades we provide many opportunities for the child to express his instincts and ideas in his play activities, and by approval, we encourage initiative and the development of individual capacity. In third and fourth grades children begin to select their leaders for games, and in fifth and sixth grades they are ready to take considerable responsibility in organizing and carrying out their games. They may form a Health and Recreation Club, elect their officers, formulate rules to guide their leaders and the groups, appoint committees to make reports on health conditions and to plan their recreation periods, make out health score cards, keep records of games and athletics and take care of play apparatus. The children will be interested in the Boy Scouts, Camp Fire Girls, Woodcraft League, Health Crusaders organizations and the Junior Red Cross Program of Health Education, and they can formulate their organization along the lines suggested for these groups, selecting what is suitable for their purposes. A club of this character should include *all* of the children in a school.

7. Recreation Activities. In these grades the following types and examples of play will furnish the opportunities for the



(1) Sixth grade girls dancing the Polish Folk-dance Krakoviak. (2) Girls in the same grade interpreting the music of the Mikado Lancers.

—Photographs from Harris Teachers' College, St. Louis

realization of the objectives set forth: hiking, swimming, skating, apparatus stunts, such athletics as the broad jump and ball throwing, such team games as volley ball, dodge ball and foot baseball, such dances as interpretative and folk dances and setting-up drills.

8. The Playground. The playground surface should be soft and porous, but firm enough so that the heels of the children will not dig holes in it. Sandy loam or a mixture of sand and clay is recommended for some sections of the country. This surface will require sprinkling with water in dry weather to keep down the dust. There should be some trees for shade and beauty. The diagrams in Volume Three, pp. 264 and 266, indicate courts, with their dimensions, that should be marked out to encourage the kinds of games and athletics which children of the grades should engage in. Lines may be marked with whitewash or wet lime. Dry marks may be made with slaked lime or a mixture of two parts sand and one of whiting. If a marker is not available, two light boards three feet long may be placed parallel to each other, with an open space between them of the width desired for the line. An old broom may be used as a brush for this stencil. A sprinkling can with the spout flattened may be used for a marker.

9. Play Equipment. The following list will make a fairly adequate equipment for the team games suggested: Two basket balls, two basket ball goals and backstops, two volley balls, one volley ball net, two volley ball standards, two soccer footballs, two playground baseballs (14-inch for outdoor, 17-inch for indoor), two playground baseball bats, a 12-inch ball inflater, a 50-foot steel tape line, a stem winder stop watch. Play apparatus may be constructed by the older boys in their manual training work. This provides worth-while projects connected with the interests of the children and is an economical means of acquiring apparatus which would otherwise entail considerable expense. The American Red Cross Manual Training Booklet No. 1 describes simple playground equipment and gives directions for construction. There are directions for mixing the concrete which is used for the setting of uprights, and directions for making adjustable seesaws, slides, swings, ladders, horizontal bars, hurdles, baseball benches and the home plate, and basket ball and jumping standards. Lists of materials and definite specifications are described, and construction drawings are included.

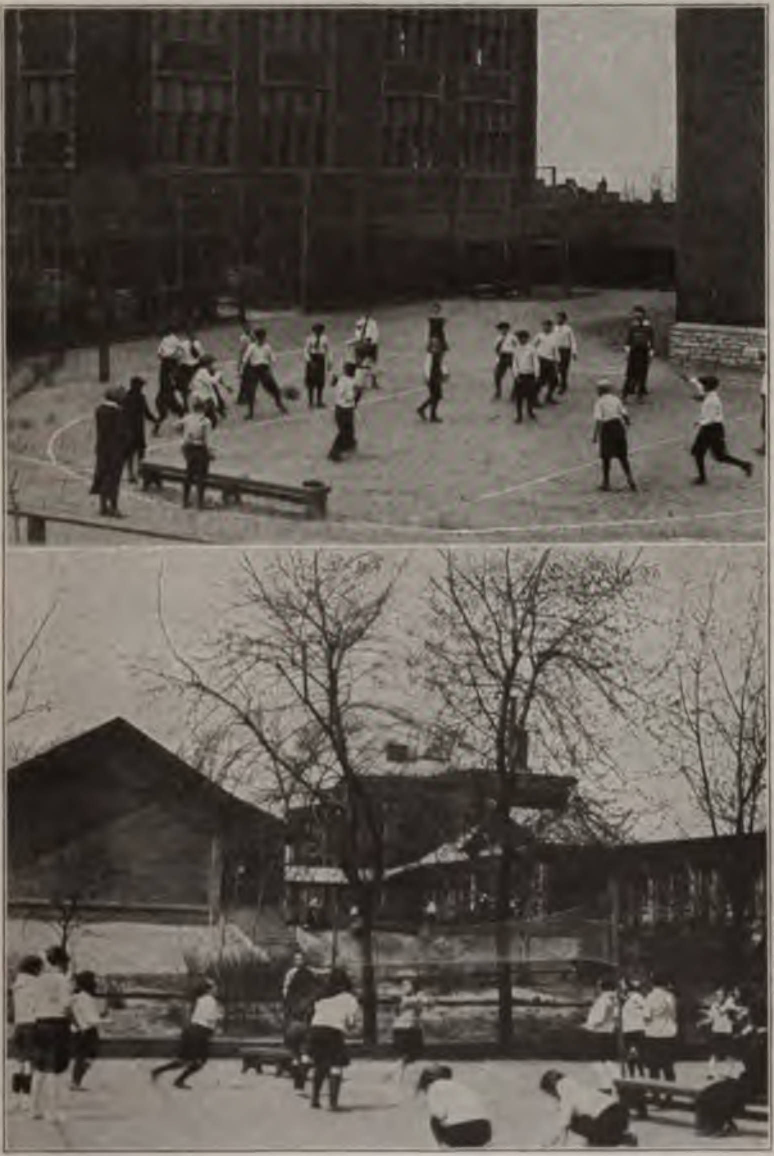
DESCRIPTION OF GAMES, ATHLETICS AND DANCES

10. **Standing Broad Jump.** The contestants stand toeing a mark or the edge of the jumping pit, then they raise the arms forward and rise on the toes, swing the arms backward and bend the knees, swing the arms forward and jump, throwing the weight of the body forward, and land on both feet. The distance is measured from the starting line to the impression nearest to the start. If the body falls backward in landing the rear impression made by the body or hand marks the length of the jump. The best jump of three is the record.

11. **Running Broad Jump.** This jump is made as the finish to a short run. The spring is made from one foot from the front edge of the take-off and the landing is on two feet. The measuring is done the same way as in the standing jump.

12. **Volley Ball.** For this game a tennis net three feet wide is stretched across the center of the court, with its upper edge seven and one-half feet from the floor. There may be six to fifteen members on each team. The object of the game is to bat (with the open palm) a volley ball over the net so that it will touch the floor in the opponents' court. The serving side only may score.

The score is one point for the serving side if the ball falls on the opponents' field, and the same server continues to serve until the ball falls on the server's field, when the serve goes to the other side. The players on a team serve in rotation from the back line. A ball to be "good" must go past the ten-foot line, but after this any number of players may relay the ball to get it over the net. The ball must always be batted with the open palm or palms. In the service it is tossed and then batted. The team wins which first scores twenty-one points. The serving side is penalized for any foul by losing the ball; the



(1) Seventh grade boys playing progressive dodge ball on rectangular court with three divisions.
(2) Sixth grade girls playing volley ball.
—Photographs from Harris Teachers' College, St. Louis

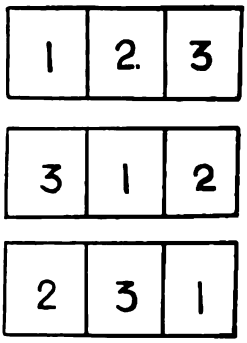
receiving side is penalized by adding a point to the server's score. It is a foul to catch, strike with the fist or dribble the ball, or to touch or reach over the net or to support another player. A ball touching the net on service or touching outside the court is dead.

13. Polish Krakoviak. This is a vigorous folk dance, done in couple formation in a circle. The name is derived from Cracow, old national capital of Poland, and the music is published by A. Flanagan Company. During the first part of the music the dancers polka forward three measures and stamp twice on the fourth measure, and repeat four measures. During the second part the dancers face each other and slide (1), hop (2) forward on the right foot, raising the left foot backward, placing the left hand on the hip, one measure, shake the right forefinger three times at partner, one measure, repeat with left foot forward and shaking left forefinger, two measures and arm hook with running around partner, two measures, repeat four measures. In the third movement a stamp is taken to the left, closing the right foot to the left, six times, six measures, and two stamps are taken on the seventh and eighth measures. The last eight measures are repeated, taking the step to the right, thus bringing the partners back together. The dance is varied by taking all of these steps in different directions; for instance, in the picture the children are taking the first step around each other.

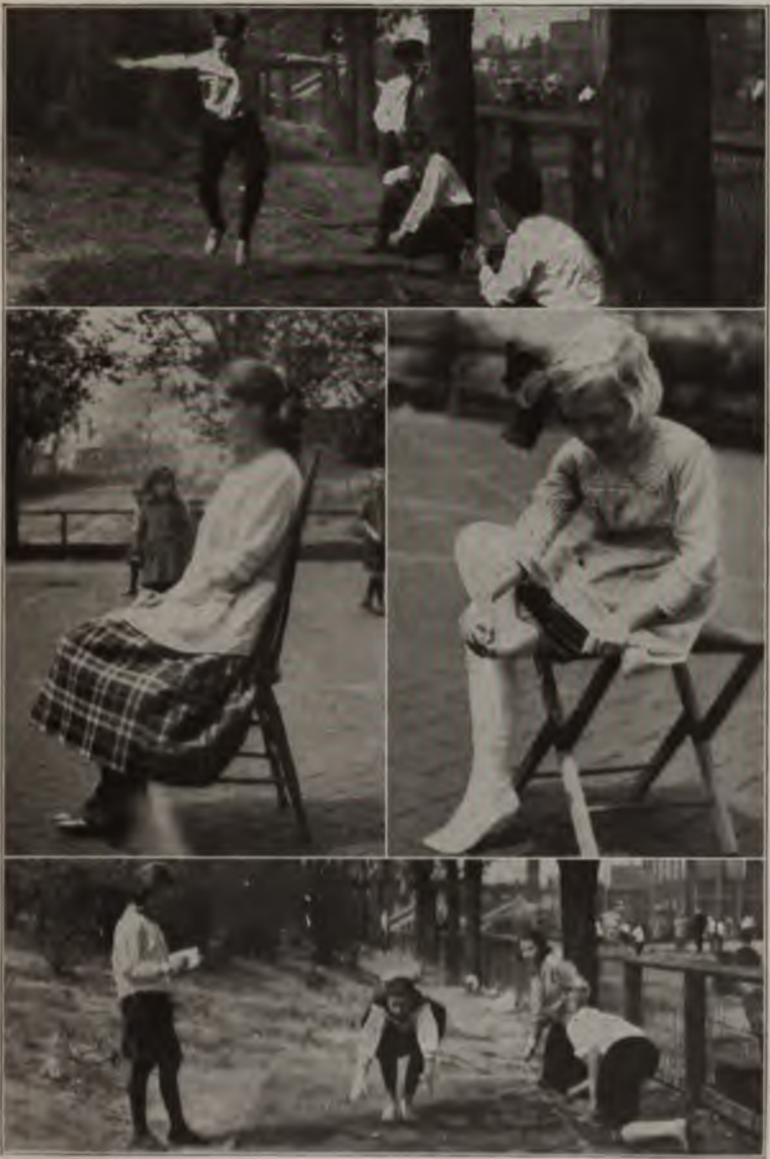
14. Interpretative Dancing. One of our pictures shows sixth-grade girls interpreting the music of the Mikado Lancers. They suggested a line formation for the first part because they thought the name *lancers* would indicate that the dance should be done in lines. They thought the first measures indicated short running steps, ending with the quick peasant curtsey in each phrase, and a whirl at the end. They decided upon a quick side step, ending in a pirouette (turning completely around) for the finish of the second theme in the music. The third part suggested a stamp step forward, with arms folded high in front. The fourth part was interpreted by a balance step sideward, pointing the following foot across in front. After they had practiced so much of the dance, they thought they might repeat these four figures in circle formation with the repeats of the music, and then repeat the whole in line and in circle to lengthen the dance.

15. Circle Dodge Ball. In this game the players are divided into two teams, with one team on the circle and the other team within the circle. Practically any number may take part in the game. The game may be played with any one of three objectives: (1) to determine who can remain in the circle longest without being hit with the ball, in which game every player hit takes his place with those on the circle; (2) to determine which team can make the largest number of hits in a given time; or, (3) to determine which team can put all of the other team out in the shorter time. This last form is sometimes played with two balls by the more expert players. Whenever a ball touches a player in the circle it scores a point or removes the player. It is a foul if it strikes above the shoulders. All balls must be thrown from outside the circle.

16. Progressive Dodge Ball. This game is played by the older boys and girls of eighth or ninth grade. Any number of players are divided into three teams of equal numbers and may be designated as 1, 2 and 3. The game is played with three innings of five minutes each. The team wins which has the smallest number of players hit in all the innings. A hit with the ball scores a point. In the first inning teams 1 and 3 play against 2, and 2 plays against 1 and 3. All hits are scored against the teams whose players are hit. In the second inning teams 3 and 2 play against 1, and 1 plays against 3 and 2. In the third inning teams 2 and 1 play against 3, and 3 plays against 2 and 1. The ball is tossed in the center court to start an inning. The score sheet is marked for each team in each inning, as shown on next page.



1	2	3
3	1	2
2	3	1



(1) Boys' standing broad jump—in the air. (2) Correct sitting position. (3) Exercise for correcting a weak arch. (4) Fifth grade girls practicing the standing broad jump; scoring and measuring.

—Photographs from Harris Teachers' College, St. Louis

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		INNINGS			TOTAL PLAYERS HIT
		1	2	3	
TEAMS	1	𝍸 III	𝍸 II	𝍸	20
	2	𝍸 𝍸	III	II	15
	3	𝍸 I	𝍸 I	𝍸 IIII	21

SEVENTH, EIGHTH AND NINTH GRADES

17. Scope of the Club Activities. In these grades the boys will manifest an increasing interest in athletic competitions, match games, field meets, tournaments and sports. The girls will be particularly interested in artistic dancing, pageantry and the milder forms of sport. Community gatherings should be encouraged, and the club should make itself responsible for community entertainments and for the discovery and improvement of community health and recreation needs.

18. Competitive Games and Athletics. Examples of suitable games are progressive dodge ball, volley ball, basket ball, baseball, soccer, tennis and hockey. Athletics may include broad and high jumping, 50 to 75-yard dashes, ball throwing for distance, 100-yard dash (for ninth-grade boys), chinning, and relay and obstacle races. Sports may include hiking, fishing, hunting, camping, skating, swimming and boating. Girls' games and athletics will include volley ball, captain ball, line basket ball, dodge ball, standing broad jump, all-up Indian club race, potato race, basket ball far throw, basket ball goal throwing.

19. Dancing. Boys and girls of this age will engage in social dancing. It is most important that this interest should be safeguarded by providing a place where there is plenty of pure air and suitable companionship. This companionship should include older members of the family who are interested in the children's interests and those who know how to help the boys and girls to select the right kind of dances and who know how to help them to achieve a high standard of social behavior.

20. Setting-up Exercises. Every boy and girl before leaving school should know a series of setting-up exercises to be taken daily when the conditions of life are such that more natural forms of exercise such as those engaged in in recreative sports cannot be carried on. Probably Walter Camp's Daily Dozen is as comprehensive a set of exercises as has been devised. These exercises were arranged by Walter Camp when he had the responsibility of keeping aviators fit during the war. Since the war this group of movements has been very generally adopted by the employees of various concerns where the occupation precludes any vigorous general exercise, and employers have given stated time for the purpose of taking the Daily Dozen. Anyone leading a sedentary life should not fail to form the habit of the Daily Dozen to put him in condition the first thing in the morning or just before retiring.

21. Corrective Exercises. Exercises for correction of postural defects and for flatfoot should be given to selected groups showing need of these exercises. This work should be supervised by a physician, if the defects are other than incidental. All children should be taught how to stand correctly, how to sit correctly and how to walk. They should know some exercises for the relief of constipation, nervousness and menstrual pain.

ATHLETIC ACTIVITIES AND EFFICIENCY TESTS

(*From report of the national committee on physical efficiency tests.*)

22. Potato Race. A waste basket is placed back of a starting line, and two blackboard erasers are placed on marks 34 feet and 42 feet, respectively, from the starting line (24 feet and 32 feet for fifth and sixth grades). The runner goes out and brings in first eraser, dropping it in the basket, goes out and brings in second eraser, touches the basket with it and then returns it to the mark, comes back and takes first eraser from the basket and replaces it on the mark and returns to the starting line. The time for this race ranges from 13 seconds for junior boys to 34 seconds for senior girls.

23. Basket Ball Far Throw. From a scratch line 16 to 48 feet are marked off. A basket ball is thrown from overhead with both hands. The feet must toe the scratch line, and the toes may not move until the ball touches the ground. Whole feet only are counted. The better throw of two will count.

24. Chinning the Bar. This is designed for boys only. A wooden bar or iron pipe may be fastened in a doorway. A 2-inch square joist 18 inches high fastened upright at the base of the door-frame will make a step for the short boys. The boy must hang by his hands at full length and must pull himself up without any swing, kick or snap until his chin is over the bar. After each pull-up he must let himself down to full length. The number of times that a boy will chin will range from 3 to 17.

25. Fifty-Yard Dash. A pace-maker may start 3 yards ahead of the runner, who is being timed. The dash is timed with a stop watch. Time will range from 6 seconds for senior boys to 10 seconds for junior girls. When they are practicing for the dash, boys may race against each other instead of for time. Minimum standards and tables for converting achievement into points for these events and for the standing broad jump, basket ball goals and chest expansion may be secured from the American Physical Education Association, Springfield, Mass.

LESSON PLAN FOR A CLUB ACTIVITY: ATHLETIC MEET

(Plan made and tried out by Miss Grace H. Ryffel in the Observation School, Harris Teachers College, St. Louis)

26. Aims. 1. To give opportunity for pupil leadership and group coöperation.

2. To give practice in activities which develop power and skill in the use of the body, which do not overtax, but which do furnish an adequate test of athletic ability.

3. To give boys opportunity to measure their ability with others of their age, weight, height and grade, and to set standards for other groups.

4. To give play to the competitive instinct and to encourage friendly rivalry and the spirit of good sportsmanship.

5. To use arithmetical knowledge in determining group

averages, and in marking the floor or field for various events.

27. Procedure. 1. Preparatory lesson: (*a*) to develop the idea of a meet through open discussion of possible events; (*b*) to have the group determine the points to be awarded individual and group winners in the events; (*c*) to have the group select captains who are capable of inspiring their teams to put forth their best efforts, and whom the team will be willing to intelligently obey; (*d*) to have the captains choose their teams.

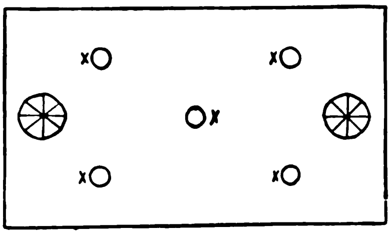
2. Conference of leaders with the teacher: (*a*) to determine the events to be taken; (*b*) to study the conditions of the field or room where the events are to be run off; (*c*) to provide for marks and materials; (*d*) to decide on rules to be observed; (*e*) to prepare the score sheets.

3. Carrying out plans made: (*a*) acquainting teams with decisions of leaders; (*b*) conducting events.

28. Description of Basket Ball. Two baskets or rings 18 inches in diameter, placed one at each end and ten feet above the floor or field, constitute the goals. The object of the game is to get the ball into the opponents' basket as often as possible in the given time. It is customary to play 15 or 20 minutes in the first half, rest 10 minutes, exchange goals and then play the second half of 15 or 20 minutes. This time, however, should be changed to suit the physical condition of the teams.

There are five players on each team, and two substitutes on each, who may relieve the other players. The forwards and center are the main goal throwers. The guards are to prevent the opposing team from scoring. As a matter of fact, when one team has the ball every member of the other team becomes a guard to the extent of trying to intercept the ball. Any player may throw a goal, but if the guards should move into the center or forward field for this purpose the center or forward should move to cover the guard's field.

The ball is put in play by tossing it up in the center of the field. The two center players, one from each team, jump for the ball, and each one tries to catch it or to bat it with the open hand to a player on his respective side. From here the ball is passed, thrown or batted from one to another until there is a suitable opportunity to score a goal. When the ball goes out of bounds, that is, crosses the boundary lines, it shall belong to the opponents of the player who last touched the ball while it was in play. Players opposing the one who is to return the ball stand 3 feet from the boundary line when the ball is thrown in. Players are not allowed to carry, kick or hold the ball, or to tackle, hold or push an opponent. Nor are they permitted to strike, kick, shoulder or trip an opponent. These violations, as well as unnecessary roughness of any kind, are called *fouls*.



A ball thrown into the basket during play counts 2 points. A foul is penalized by a free throw for the other team from the 15-foot line, with all other players outside the lane. If a free throw passes through the basket it scores 1 point.

29. Swimming. This is one of the most valuable forms of exercise. The general muscular activity, the tonic and cleansing effect of the water, the satisfaction which comes with achievement, combine to make it almost incomparable as a means of recreative exercise. Beginners should learn the breast stroke, which is good for posture, and should learn how to breathe correctly while swimming. They should learn the back stroke while floating. They should be able to pass the American Red Cross beginner's test. Those who have passed the beginner's test should be taught the side stroke, trudgeon, crawl and the front dive. They should increase the length of the swim and learn to retrieve an object from deep water. They should learn resuscitation by the Prone Pressure method,[1] and should try to pass the American Red Cross swimmer's test. Those who have passed the swimmer's test should learn endurance swimming—one-half mile, speed swimming and water games, as water polo. They should learn the running, side, back, and swan dives. They may work to pass the American Red Cross life saver's test. Of course this form of exercise should be properly supervised, and the children should be safeguarded from dangers of insanitary pools or treacherous streams.

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[1] See *Education in Accident Prevention*, Lyons & Carnahan, Chicago.

LESSON PLAN FOR SOCIAL DANCING: AMERICAN COUNTRY DANCE, SOLDIER'S JOY

(Plan made and tried out by Miss Grace H. Ryffel in the Observation School, Harris Teachers College, St. Louis)

30. Aims. 1. To arouse an appreciation of and preference for the country dance so that undesirable forms of the so-called modern dance will not appeal, (*a*) through an unconscious feeling for the easy and fascinating swing and rhythm of the dance; (*b*) through the pleasure experienced because of the delightful social nature of the dance and the vigorous exercise afforded.

2. To develop a knowledge of the dance, its steps and figures.

3. To give opportunity for the practice of the dance.

4. To awaken and guide desirable qualities and to suppress undesirable ones arising from bringing the boys and girls together for this work. (*a*) Desirable qualities: courtesy, gentlemanly and ladylike conduct, pride in personal appearance, feeling of comradeship between boys and girls. (*b*) Undesirable qualities: undue timidity, false modesty, and awkwardness.

31. Procedure. 1. Preparatory lesson in literature class: Building up atmosphere through (*a*) reading articles from magazines about the country dances; (*b*) discussion of occasion, character and music of the dance as it was formerly done, and showing of pictures of people dancing these dances.

2. Teaching the dance with reference to literature lesson; building up steps, formations and figures.

I. Steps. (a) Country dance step—an easy, springing run with easy arm swinging. Encourage all to interpret the music and select the correct form. (b) Buzz step. Interpret the call, "Swing your partner." Have ordinary dance position shown and improve it if necessary. Demonstrate buzz step, if necessary. In buzz step the boy holds the girl to the right so that right shoulders are together. The step is a short, running step around in a circle with the right foot always placed on the same spot and the left foot advanced each time.

II. Formation: around the room in couples. This may grow out of the grand march. Question to get opposite couple formation. Alternate couples swing about so that two couples face each other.

III. Figures. "Calls" listed on board.

CALLS

1. Forward and back.
2. Swing opposites.
3. Swing partners.
4. Ladies' Chain.
5. Forward and back.
6. Forward and pass on.

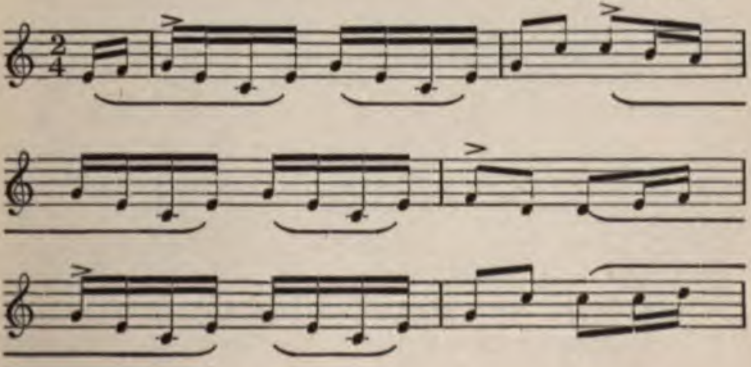
Play measures for each figure and have group listen and then with repeat of the playing interpret the call. The passing on of the 6th figure brings new couples together.

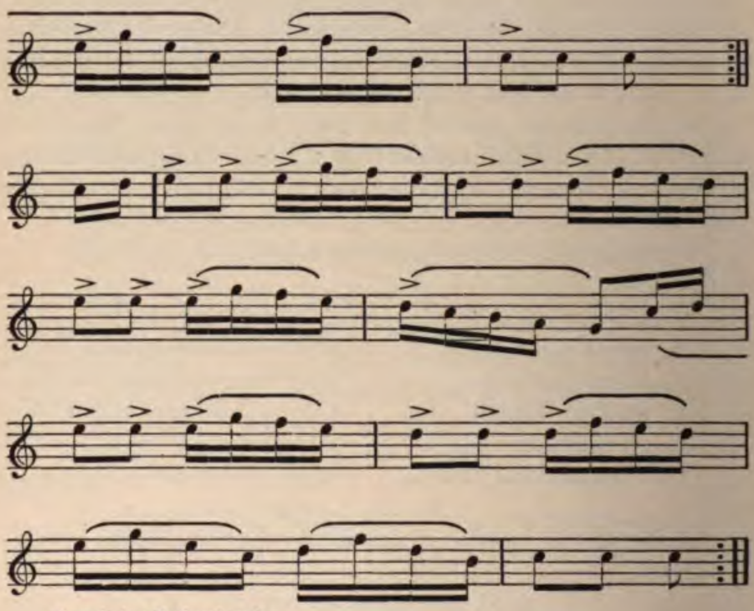
Children will be able to interpret all except ladies' chain. Question, explain, and demonstrate ladies' chain, in which girls take right hand and pass to opposite boy, who takes girl's left hand with his left hand and grasps her right hand with his right hand in rear, swinging her forward around to face other couple; this is repeated to take girls back to original place.

3. Dancing *Soldier's Joy* at social gatherings.

SOLDIER'S JOY.

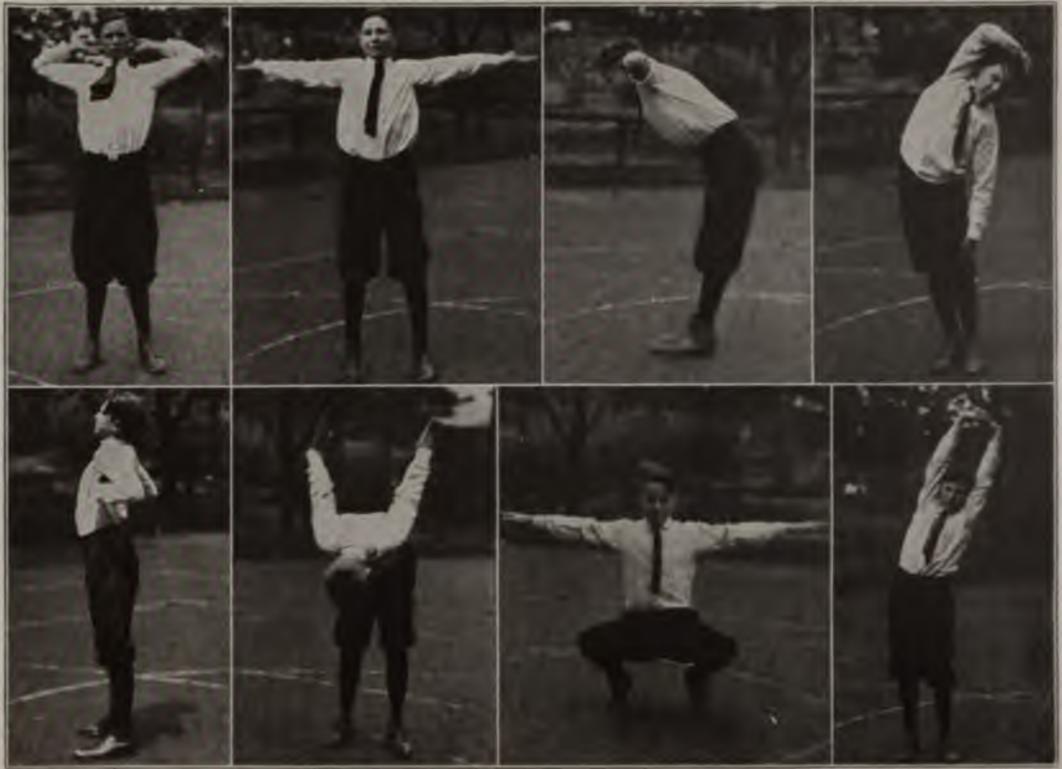
Arr. by L. J. SOPER.





Permission E. Burchenal.

32. Description of the Setting-up Exercises. The *first exercise* of Walter Camp's Daily Dozen is the taking of correct standing position. Note the picture. The head and chest should be well raised. The *second exercise* is the placing of the hands on the hips, and lowering to the sides. The *third exercise* is as shown in picture 1, and is the placing of the hands in rear of neck and lowering sideward downward. The *fourth exercise* starts with the position shown in picture 2. The palms are upward. From this position the arms describe circles twelve inches in diameter at the finger tips, first forward, then backward. In the *fifth exercise* the arms are raised upward from the horizontal position to an angle of forty-five degrees while inhaling and raising the heels. Arms are lowered to the horizontal and the heels lowered while exhaling. The *sixth exercise* is bending forward and backward as indicated in pictures 3 and 5, except that the hands are kept in rear of the neck for the backward as well as the forward bending. The *seventh*



ADAPTATION FROM WALTER CAMP'S "DAILY DOZEN"
Eighth grade boys of the Observation School, Harris Teachers' College, St. Louis.

exercise is sideward bending to the left and to the right, touching the top of the ear with the fingers of one hand and the knee with the fingers of the other hand. This is shown in picture 4.

The first position of the *eighth exercise* is shown in picture 5, and is taken inhaling; the second movement of the exercise is shown in picture 6. The arms have been straightened forward and swing downward-backward with exhaling. The *ninth exercise* is shown in picture 7. This is a deep knee bending and returning to standing position. The *tenth exercise* is shown in picture 8. The body is circled from the waist to the left, forward to the right, backward to the left, and up. This is repeated to the right. The *eleventh exercise* is shown in picture 4, and is taken first to one side and then to the other side. In the *twelfth exercise* the arms are stretched upward with inhaling, and the arms and body are carried into the position shown in picture 6 with exhaling. Each exercise is taken five times. Return to the resting position between exercises. A few modifications of the original exercises are indicated and suggested by these descriptions and pictures.

33. Standing Position. The key-note position for good standing posture is shown in one picture. The head should be held erect, and the chest should lead, but should not be raised unnaturally. The shoulders should be on the same level when viewed from the rear. A child should be shown the correct position and encouraged to assume the correct position in standing and walking. The teacher should guard against overcorrection and a stiff position. All kinds of natural play activities in the pure outdoor air, in unrestrictive clothing and the setting-up exercises, will develop the power to hold better position.

34. Exercise for Round Shoulders. The swimming position exercise will tend to strengthen the upper back muscles and pull back the shoulder blades, while giving breadth to the chest position. From the position shown in the picture the arms should be carried sideward-downward in a plane with the body, forcing them well backward at the same time. The arms should then be bent, bringing the hands to the chest and then extended forward to the first position. The exercise should be repeated several times, but not to the point of fatigue. Exercises for correction of posture should be taken at a regular time daily.

35. Correct Sitting Position. The first consideration in sitting position is to push the hips as far back in the seat as possible. The feet should then rest flat upon the floor, with the lower legs forming a right angle with the thighs. Note the picture.

36. Exercises for Weak Arches. If the longitudinal arch on the inner border of the foot is flattening, the condition may be improved by exercises which strengthen the muscles which hold up this arch. In the starting position shown in the picture the foot is bent up and then circled out to the right, down, in to left, and up to starting position. Reverse starting position and circling for the left foot. Alternate the circling of the feet five times each for twenty to thirty times. Exercise in stocking-feet. Walking on the ball of the foot with the heels raised and the muscles on the inner side of the legs contracted is a very good exercise for fallen arches. Another exercise is walking on the toes, crossing the feet with each step.

37. Exercises for Nervousness. Balancing exercises have a quieting effect on the nervous system. The concentration upon the feat of balancing relieves contractions that cause nerve tension or reduces diffusion of nervous energy. One may balance various objects on the hand. The picture shows a child balancing a club on the hand while walking forward. Bean-bags or books may be balanced on the head while walking. Walking a chalk mark or a balancing beam is another form of this type of exercise. Also one may hold balancing positions for the body, as, for instance, standing on one foot with the arms extended.

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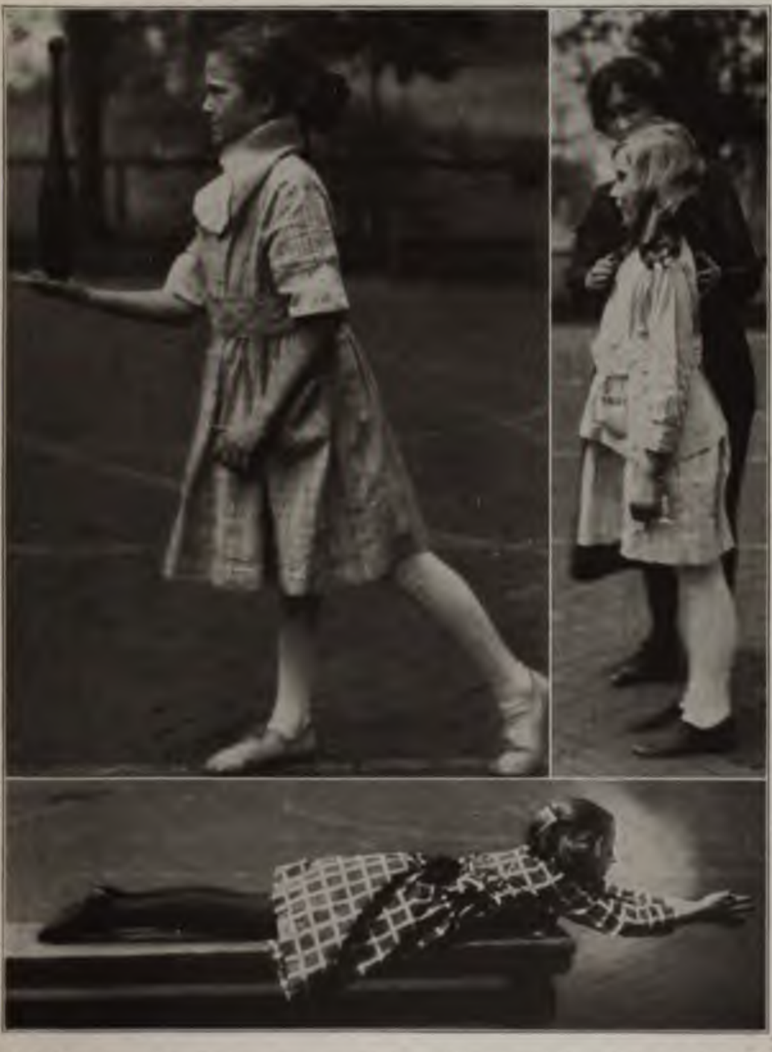

(1) Balancing exercise for nervousness. (2) The "keynote position" for good standing posture. (3) Swimming position for round shoulders.

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CHAPTER SEVEN

The COMMUNITY FAIR

By C. R. Phipps

Professor of Agriculture, Kansas State Normal School,
Emporia, Kansas

The rural school of to-day should do its part toward the establishment of a successful Community Fair. This fair should be held in the first half of October, and should feature displays of agricultural and industrial products from the farm, home and the rural school.

It is suggested that each rural school hold its own display in the school building on Monday and Tuesday, and then move all the displays on Wednesday to the Community Fair, to be held in the nearest town which serves as the Community Center. The displays may be taken home on Saturday, or—

In the following week the County Fair may be held, and each of the Community exhibits may be moved to the county exhibit. This will do much to develop the county agricultural and industrial interests.

Social interests should be featured during the week. Games and contests for amusement, and different kinds of recreation should be planned. In all of this the farmers should be taught to entertain themselves. Political speeches and side-shows should not be permitted. Additional social features may be added in form of a community picnic dinner, followed by amusements. See *Community Interests*, page 35, in this volume; also pages 80-82, Volume III.

The whole aim of the Fair should be to further the educational and social interests of the community, along with the agricultural and industrial development.

The following suggestions are planned for those having the exhibits in charge. These directions and standards should be placed before the exhibitors:

STANDARD AND DIRECTIONS FOR PREPARING AGRICULTURAL AND INDUSTRIAL EXHIBITS FOR FAIRS

I. *Material to be used:*

Must be fresh; this season's growth.

Card must be attached, bearing common name of exhibit, also owner's name. If seed is shown in sack, place one card inside and another outside. Attach cards with fine wire or strong string.

II. *Grains:*

All seeds exhibited should be:

1. Uniform and sound.
2. Meet or excel legal weight per bushel.
3. Shown in standard quantity of 1 peck (for small grains), 10 ears for corn, etc.

   (Write the Secretary, Chicago Board of Trade, for copy of "Rules and Regulations" controlling sale of grain in Chicago.)

III. *Standards for exhibits of agricultural products:*

1. Corn:
   - a. Upland—10 ears—9 to 10 in. long.
   - b. Lowland—10 ears—10 to 11 in. long.

     Must be uniform in size, shape and color. (No mixtures.)

     Yellow corn with red cob.

     White corn with white cob.

     Choose deep kernel, on small cob, with bright, strong germs.
2. Small grains:

a. Sheaves.

Choose long, well-filled plants, cut close to ground before fully matured.

Bind together enough to make a 4-inch bundle (diam.).

Hang with heads down to dry.

Bind in two or three places with ribbon to harmonize with color of straw.

Strip of all leaves before binding.

b. Seeds:

Exhibit 1 peck in grain sack. Seed must be uniform, sound, well ripened, vital, and evenly colored.

3. Sorghums:

a. For forage.

Cut near ground to show natural height of plants, when seeds are in soft dough stage. Hang heads down in dark room with free air, over damp sawdust. When cut, plants should be bright green in color, with no rust or mold, and leaves left on. When dry arrange in bundles 8 inches in diameter, tie tightly in four places.

b. Heads.

Choose ten heads for each variety exhibit. Must be uniform in variety, size, shape, maturity, color, etc. Select heads when grain is almost mature. Hang heads down in dark room. When dry, arrange in bundles of ten heads. Exhibit heads loose.

4. Grasses and millets:

Cut when best ripened for feeding purposes. Hang heads down in dark, dry room with free air, over damp sawdust. (Keep color.) Leave all leaves on the plants. When dry tie neatly in 4-inch bundles. Bundles must not be less than 4 in. nor more than 6 in. at middle band. Tie in three places with ribbon tape. This exhibit should include wild and tame grasses, clover, alfalfa, sweet clover, etc. In case of alfalfa, show a bundle for each cutting, where possible to do so. Number each cutting.

5. Fruits:

   Select specimens for uniformity of color, size, shape and variety characteristics. Exhibit on small plate, five specimens to the plate, with four on the plate and one resting on the other four. Choose varieties best suited for your locality.

6. Vegetables:

   Must be uniform in size, shape, color and smoothness. Choose specimens according to market demands. Exhibits look best in small baskets, box or plate to harmonize. Large vegetables may be shown by the peck. (Potatoes, beets, sweet potatoes, etc.)

7. Flowers:

   Classes of flowers to be shown:

   a. For line effect. Exhibit two or three in slender vase. Goldenrod, etc.

   b. For form effect:

      Shape or outline the attraction. Exhibit three, five or seven in tall vase. Do not bunch. (Lilies, etc.)

   c. For color effect:

      Color the attraction.

      Bunch in mass, with light colors at center, and darker at edge. (Sweet peas, etc.) Observe rhythm and balance in flower arrangement.

8. Eggs:

   Classes.

   a. White—twelve eggs.

   b. Brown—twelve eggs.

      Choose clean, smooth uniform eggs, of same size, color and shape. Never wash eggs. If eggs must be cleaned use alcohol. Must weigh 24 to 26 oz. for first class eggs, and 26 to 28 oz. for extras.

Exhibit on neat plate, showing all eggs. Place owner's name on card on the dish.

9. Butter:

Show in 1-lb. molds. Must be fresh, not less than 80 per cent butter fat, not more than 3 per cent salt and 11 per cent water.

Quality is judged by flavor, texture, color, amount of salt and general style and appearance. Color should be a clear, bright, golden yellow.

Value of points in judging:

Flavor	40 to 45 points
Texture	25 to 30 points
Color	10 to 15 points
Salt	10 points
Finish	5 points

10. Cheese:

Cheese is judged as follows:

Flavor	45 points
Texture	35 points
Color	15 points
Finish	5 points

Exhibits in 1-lb. lots satisfactory. End should be parallel and sides straight. Should be bandaged to retain freshness. Bandage should extend evenly over ends of cheese for about two inches, and should be straight and smooth. Cheese should not be wet, sloppy, or "leaky."

All perishable produce should be kept cool and fresh until exhibit is made.

All produce should be neatly wrapped, carefully arranged, and not handled until judged.

Produce belongs to the exhibitor, and should be taken home at end of contest.

The exhibitor should not fail to attempt to secure some advertising value from his exhibits. If he has anything to sell, he should advertise it carefully. It brings results.

The following group will furnish social entertainment:

IV. *Patriotic exhibits and contests:*
  1. Canning contests.
    a. Vegetables.
    b. Fruits.
  2. Knitting contest.
    a. Red Cross.
    b. General.
  3. Home- and school-made flags.
  4. Surgical dressing and garment making contests.
    a. Making and folding bandages.
    b. Refugee garment making.
  5. Tableaus such as:
    a. Betsy Ross and first flag.
    b. Francis Scott Key writing *Star Spangled Banner.*
    c. Drawing up Pilgrim Compact in cabin of *Mayflower.*
    d. President Wilson urging declaration of war against Germany.
  6. Miniature construction work, such as:
    a. Prairie schooner scene.
    b. Sod-house scene.
    c. Indian camp scene.
    d. Model of first legislative building of your state.

V. *Exhibits of home- and school-made industrial products.*
  1. Foods.
    a. Ensilage.
    b. Sorghum molasses.
    c. Maple or cane syrup.
    d. Maple sugar.
    e. Cured meats.
    f. Dried meats.
    g. Pickled meats.
    h. Mince-meats.
    i. Canned vegetables and fruits.
    j. Dried vegetables and fruits.
    k. Preserves and jellies.

- l. Bread, cakes, etc.
- m. Cheese.
- n. Butter.
- o. Cider, vinegar and apple butter.

2. Garments.
    - a. Aprons and house dresses.
    - b. Dresses.
3. Fancy work.
4. Knitted articles.
    - a. Scarf.
    - b. Helmet.
    - c. Sock.
    - d. Sweater.
5. Red Cross articles.
    - a. Bandages.
    - b. Surgical dressings.
6. General.
    - a. Home-made soap.
    - b. Home-made brooms.
    - c. Baskets.
    - d. Plans for farm buildings, with models.
    - e. Other home-made industrial articles.

Plan a school fair, get the Community Fair started, and talk it the year round.

CHAPTER EIGHT

ENRICHMENT OF THE COURSE OF STUDY

By Dr. Charles A. McMurry

1. Help Needed on Important Topics. Public School Methods is a direct answer to the most important need of teachers in elementary schools, namely, the enrichment of the common school studies with interesting illustrative material on important topics. The progressive and energetic teacher finds it difficult to get the definite and full information she needs, and that the children especially need, for example, on the Panama Canal, on New York City, on William Penn, on shipbuilding, on the life of Walter Scott or on Longfellow. Every really important topic requires an enrichment with lively information not found in the textbook. In most cases it is hard to find just what is needed, and even to know where to look for it.

2. Richer Content Needed. Public School Methods steps in at this crisis, this moment of pressing need of the teacher, and supplies just the kind and quality of knowledge on important topics that is essential to success. Poor teachers do not feel this need so much, because they are satisfied with the dry and brief outlines of the textbook. But a wide-awake teacher knows that a fuller descriptive, concrete kind of information is absolutely necessary to awaken attention and interest in children and to give them a sound basis for thought, a real understanding of the subject.

The recent development of our school studies has brought into great prominence this peculiar need of teachers for a more concrete enrichment of classroom lessons. We have introduced a great many new studies in the last few years, such as nature study, domestic science, industrial arts and physical training. The course of study has been greatly expanded to take in many useful and ornamental subjects, especially those that claim to bear closely upon modern life, such as shop-work, the school garden and agriculture, health and sanitation, civics and industrial topics, current events, etc. Of course, the original purpose of all these new studies and expansions of the curriculum was to enlarge and even to enrich a child's education.

3. Too Many Topics. But the inevitable result of all this expansion is that we are trying to teach too many things. We are spreading out over a vast number of subjects in a hasty, shallow way, and we do not have time to go into any important topic deeply enough to make it interesting and vital, that is—to make it *educative*. We are stuffing children's minds with a multitude of poorly-digested topics, little understood, until they are tired and disgusted. We couldn't make a worse mistake than to try to overload children's minds with this vast accumulation of dull knowledge.

Finally, to make sure that this outline of knowledge is fixed in mind, we resort to tedious and oft-repeated *drills* and *reviews*. Drills and reviews are necessary, but they can never take the place of full, rich knowledge. First see to it that children are supplied with an abundance of rich and productive knowledge; then let the reviews and drills be based on such well-understood and well-appreciated knowledge.

4. Emphasize a Few Big Topics and Projects. We have reached a crisis in education, and are now compelled to find a better system than this sapless kind of knowledge. In fact, we can now see just what is needed—we know "where the shoe pinches." Too much knowledge of this sort is worse than too little. What we must have now is a more careful selection of a few important topics in each study, and then gather upon these important topics enough interesting and significant concrete knowledge to make them intensely real and vital. Every real educator now recognizes this powerful need, this overwhelming demand for a deeper and stronger knowledge of whatever topics we teach. This superficial scattering over a vast field of knowledge must be stopped if the children are to be saved from such overloading and from the distress and discouragement that come from an oppressive course of study. This means, of course, elimination from the present course of numerous minor and trivial topics, so as to give adequate time for the major topics that are all-important and that deserve a complete demonstration, a treatment that fully convinces the child of their value and meaning.

These conclusions as to the dangers of our present overcrowding of studies are not theoretical speculations of theorists. They are rather the outcome of painful experiences of good teachers throughout the country.

5. **Two Modes of Relief.** PUBLIC SCHOOL METHODS offers two principal means of relief from this over-extended and multiplex course of study, this dull routine of lifeless studies. First is the selection of a few important topics for full, rich, descriptive treatment; second, the actual collection and grouping of this valuable and interesting instructive knowledge exactly suited to big topics. It is no slight matter to select wisely the leading topics which most deserve this kind of elaborate treatment. It is a still more difficult task to search out and bring together into a simple description suitable to children this fruitful well-ordered knowledge bearing on one large topic. This is the great task to which the series of volumes has devoted itself, and the result is a series of valuable object lessons in all the school studies, which are designed to give teachers and children relief from overburdensome studies; and at the same time the powerful stimulation of important studies made clear and vital through proper enriching materials is provided.

6. **Supplementary Matter Greatly Needed.** It should be well understood that the textbooks in use which outline the various studies are a necessary part of our school equipment. It is now well appreciated by all trained teachers and by the makers of textbooks themselves that these textbooks require reënforcement of illustrative, descriptive additions on all the important topics. It is clearly seen that the textbooks in recent years

have become more condensed, more brief in the treatment of topics, and that supplementary books in history, science, geography and literature are everywhere recommended. Indeed, the failure to supply teachers and children with this enriching supplementary knowledge threatens all our instruction with dry rot and dull performance, with barren *outlines* of knowledge instead of the genuine article of real knowledge.

This demand for reënforcing and enriching elements in our school instruction is a fundamental need, a demand from which there is no possible escape.

7. A Library of Choice Material. But the great majority of schools, especially in villages and rural communities, are not supplied with libraries of such supplementary books as are necessary. Indeed, many city schools have no adequate libraries of this sort. For such schools—and they constitute the large majority of all the schools—PUBLIC SCHOOL METHODS supplies a library of selected supplementary materials, most suitable and instantly available for the purpose. In many important topics these volumes directly supply the desired enrichment of detailed descriptive information; in other cases they give specific reference to books and chapters where this information can be had. Even with books and libraries at hand, many teachers do not know how to find the special material required, because they have not read these books and are not aware of the riches close at hand. To get results we must plan to bring teachers into closer contact with the concrete material required in the development of main topics.

In this series of volumes are brought together, in direct relation to each grade, a wide variety of such concrete illustrative material, selected and arranged with reference to the teacher's needs.

8. Choice Stories. First may be mentioned stories, fables, fairy tales and myths suitable for primary grades, for example, as given in Volume I, pages 60-68. On page 88 of the same volume is a list of stories; on pages 89-91 a list of story books for use. Besides this, a preliminary chapter discusses the value of stories and the method of handling them. Again, on pages

291-297 is a further presentation and discussion of stories in connection with language work. In fact, the story plays an important part and is illustrated by many examples in intermediate and later grades. On pages 451-468 (Vol. I) is another series of select stories fully presented and ready for the teacher's use.

9. Biographies. A second series of remarkably valuable additions is found in the biographies of such men as Champlain, Marquette, Boone, Washington, Fulton, Franklin, Columbus, Longfellow, Eliot, Jackson, John Smith, Robert E. Lee and others. This kind of biographical narrative is distributed through intermediate and grammar grades and is of vital significance. The biographies of American explorers and of frontiersmen are of marked value for the intermediate grades. They are powerfully interesting and adventurous stories, and besides this, they are full of the most valuable elements of geography and history. They furnish, indeed, the best of all introductions to these studies. Enough of this sort of interesting biography is presented in the material for these grades to furnish the teacher with a means of awakening a real interest in the great men of American history and to cultivate a lasting impulse toward biographical studies. The biographical element continues strong through the grammar grades and is of such vital importance that it will receive a fuller account in a later discussion.

10. Full Type Studies. In volumes Four and Five are also found an extensive series of completely developed *Type Studies*, in which big object lessons are presented in their full descriptive elaboration. Such type studies not only supply teachers with interesting concrete data with which to enlarge the main topics in geography, history, science and literature, but they supply an organization of material suitable to children and to progressive development of thought in big topics which is a superior pedagogical training for the teacher. The method of handling such big topics is suggested, and the value of comparison, of full reproductions by the children, of questions and discussions for producing freedom and self-activity is shown.

11. Great Projects. Many of these elaborated type studies are *projects*, such as the Panama Canal, Irrigation in the West, Burgoyne's Invasion, Columbus' First Voyage, Louisiana Purchase, Lewis and Clarke Expedition, Erie Canal, Invention of the Cotton Gin and Fulton's First Steamboat. The method of dealing with projects is in vogue, and these fully developed and described projects are concrete examples of this method and of its value. A fuller discussion of the type study and of projects will be given later in this chapter.

12. Working Out Type Studies. It is well for the teacher to try his own hand at working out such type studies and projects. Some of these topics are given in full; others are presented merely in suggestive outline, and the work of hunting up the material to fill out these outlines is left to the teacher and to his pupils. Where schools are supplied with good supplementary books and references, such topics ought to be investigated and reported on by the children in the sixth, seventh and eighth grades. PUBLIC SCHOOL METHODS has been extensively employed in schools as a reference work for use by children in assisting them with information on topics they are called upon to read up and investigate.

13. Detailed Method. Still another kind of elaborated treatment of topics is often presented in these volumes in which a topic is developed by question and answer, as in the treatment of famous pictures and selections in literature, of nature study topics, etc. It is well for the teachers to see a few such lessons showing the details of questions and answers, the manner of conducting discussions and the free participation of children in developing the thought side of lessons in literature or history or science. This suggests also a still more difficult and perhaps more important kind of class instruction, known as the socialized recitation, in which the direct initiative and free participation of the class in the class work is brought about.

14. Many Drawings and Diagrams. PUBLIC SCHOOL METHODS is also abundantly supplied with drawings and diagrams, with full-page illustrations and with specially drawn maps to illustrate the particular topics under treatment. Such an elaborate use of picturesque devices is designed expressly to stimulate teachers to use graphic modes of illustration, to make the blackboard also serve in many ways to clarify instruction; in short, to magnify the importance of concrete, illustrative modes of teaching. This applies to arithmetic and history and science; indeed, to all subjects to a remarkable degree. Children themselves should be encouraged to resort to graphic and original modes of expressing their thoughts, to diagram freely on the blackboard and to use constructive devices, as in making locks, building a bridge or making a model of a building, coal mine or ship.

15. Graphic Devices Given in Abundance. In addition to the concrete modes of enriching the course of study, thus far mentioned, many other successful devices for vivifying and clarifying school subjects are graphically displayed in this publication, as shown in the drawing lessons, Volume Two, and in practical *Nature Studies* by Dr. Hodge. In Volume Three, Chapter Six, on *School Management*, the study of schoolhouses and equipment is illustrated in this fashion. The kindergarten chapters are enlivened and reënforced with this valuable method of illustration. Indeed, the series of illustrations enumerated at the beginning of each volume gives evidence of a remarkable display of picturesque illustrative machinery of all sorts of inventive devices for clearing up difficult points in instruction.

16. Powerful Demand for Concrete Instruction. The history of education during the last three hundred years is a progressive struggle for the introduction and use of concrete, illustrative modes of teaching. It is a perpetual effort to escape from the dry formalism of textbooks and from this dull routine in studies. All the great educational reformers, such as Ratick and Comenius, Rousseau, Pestalozzi and Froebel, even philosophers like Locke, Bacon and Socrates, have demonstrated the folly of abstract instruction and the imperative demand for vital, life-giving concreteness in studies. In fact, we now go one great step further and call for direct experience, motor activity, employment with tools and materials in shop and garden and kitchen, activity on the playground and games in the school itself, going on tramps and excursions, the active working out of projects which partake of the same character as life enterprises. The real project is always a concrete, individual undertaking, never a bald abstraction, at least not in the work of elementary schools.

PUBLIC SCHOOL METHODS is saturated with this idea of concrete instruction, of objective demonstration. It settles the point upon which they may be of most value to teachers, namely, by the strong reënforcement of the curriculum with full information and objective example charged with a life content.

17. Added References. This positive enrichment of large topics with descriptive background is followed up by extended lists of profitable supplementary books, and even of particular references to stories, poems and type studies suitable for use in special terms and grades. What teachers need for their daily help is well-chosen lists of suitable supplementary books and pamphlets, maps, pictures and monographs on special topics which exactly fit the special topic and the special occasion.

A well-selected, small school library of the best supplementary books, made available by detailed reference, would enable teachers to equip themselves with the knowledge resources indispensable to good teaching. At the same time it would put these materials at the disposal of the children so that they could learn how to use books, how to study and report on main topics; how to perform some real work in the nature of investigation.

The volumes of PUBLIC SCHOOL METHODS go a long way toward supplying this need, of opening up the field of study and pointing out the main lines of effort to be followed now and continuously throughout the course.

A strong movement should be made in all schools to supply such a medium-sized, select library, and to show teachers how to use the books.

18. Richer Pastures. It should be remembered that just beyond the outlines of the commonly used textbooks lies a rich and inspiring field of knowledge. If children ever acquire a liking for books and for the real springs of knowledge they must step over this boundary that commonly separates the school from real life and from the great books. It is extremely desirable that children shall get a taste from these richer pastures. Textbooks furnish but scant nourishment for an inquiring and progressive mind. Give every child at least a chance to get at these deeper sources of refreshment at one or more of the genuine fountains of life.

If we could get young teachers once started in this method of elaborating important topics and could supply them with a small library of suitable volumes for enriching and expanding their knowledge of the chief topics they are actually teaching, we could make a good normal and training school out of every schoolroom. For this is the kind of cumulative, inspiring knowledge which makes a good teacher, the kind that enriches the daily program, that finds its use and value in the immediate utilities of knowledge-gaining and knowledge-organization.

By holding to fundamental channels of thought we can make no mistake, but shall find our studies growing more profitable from day to day and from year to year.

TYPE STUDIES: THEIR VALUE AND USE

19. Types as Organized Subjects. The employment of type studies is a characteristic and outstanding feature of PUBLIC SCHOOL METHODS, and teachers who use this work should become well informed regarding the nature and value of such type studies. They should study them thoroughly, mastering material and organization as a basis for actual teaching. These are not merely collections of interesting material, like supplementary readers, but they are designed as specific arrangements of valuable and stimulating knowledge involving the best teaching processes. They should be fully tried out in classrooms as a fundamental method or plan for teaching. They are not worked out in minute detail of question and answer, but in a broad scope and with abundant knowledge data. The minor details of method should always be left to the individual teacher.

But the fundamental organization of one of these type studies furnishes a broad highway, directing the teacher in his main movement of thought in a series of lessons. They are not theoretical discussions of how to teach, but definite, useful arrangements of knowledge, giving the teacher what he needs in the order in which it is developed. They are at least serious attempts to furnish the teacher this kind of direct and practical help.

These type studies may be called a combination of the theoretical and practical, because they furnish both material and method combined in a large teaching unit which can be carried directly into the classroom, not for rigid imitation in a narrow sense but for intelligent adaptation and adjustment to particular schools and classes.

20. An Important Center. First of all, a type study is an important center of thought, a nucleus around which to group and organize a full body of knowledge. It develops with the growth of a dominant idea. A single idea rules a large topic such as a type study. The growth of Chicago as a commercial center is a good example (see Vol. IV, p. 353). First, Chicago is important in itself by virtue of its far-reaching commercial relations; second, it illustrates and clears up an idea that interprets other important commercial centers, such as St. Louis, New Orleans, San Francisco, New York—in fact, all great commercial centers. To show how Chicago has developed from small beginnings step by step in less than a hundred years to a world importance is a striking revelation to the child of how the chief commercial and industrial forces have been growing and organizing. It is assumed in a type study that time will be taken to go to the bottom of the subject, with a full investigation into the facts and developments of such a topic. It pays to spend much time, collect and organize an abundant, descriptive knowledge, so as to take in the whole situation, to trace facts and causes to their source and to let the whole topic develop richly and understandingly. Let the topic grow and expand in the child's mind until it works out a full demonstration of its scope and value.

21. A Permanent and Growing Center of Organization. Such a topic elaborately expanded is a complete object-lesson that makes a strong and lasting impression. As a center of organization it will be still further strengthened and intensified by later type studies, because we expect to use it again and again; to apply its main idea to many new but similar situations in later studies extending through the years of school life and even beyond.

A good type study properly worked out is a permanent and growing center of organization. It is deep-rooted, and grows perennially. After many excursions into the outer world we keep returning to this home base. Such a growing topic as that of Chicago has a dynamic energy that carries to a predestined conclusion. It is strongly purposive and energetic. The topic holds within itself a principle of growth and expansion. The desire to explain the unusual and rapid development of Chicago lends a motive to study which hunts for the influences at work in producing such a remarkable outcome. A topic which thus pushes forward to greater results keeps the mind active and expectant. There is no stagnation in dull facts, but an active assembling of the facts to see what results may be expected to spring out of them. It is like following a moving picture in a connected series of events working out toward a climax. The idea that lies at the basis of a type study is like the germ coiled up in the seed. It has in it stored-up life and energy; at the right moment and under favoring conditions it springs into vigorous, natural growth.

22. Active Forces at Work. Even a study like that of Mt. Shasta, a typical volcano (see Vol. IV, p. 362), has in it this accumulated energy. At first glance Mt. Shasta appears as a type of stability and permanency, but after all the idea embodied in its treatment is a study of the forces that built up and produced this huge mass, and later on of the forces of waste and decay that are tearing it down. In other words, the life history of the volcano, showing the gigantic earth forces that have been and still are perpetually at work creating and then destroying it —this constitutes the essence and meaning of the whole study.

23. Evolution of an Idea. In this forward-moving stream of thought there is a momentum that provides for a continuous organization of knowledge. Growth itself is a process of assimilation and organization. An important idea has a life history, as the idea of the steam engine in the inventive mind of Watt, or William Penn's idea of founding a colony for relief of the Quakers. It is this natural evolution of an idea which should be the central thread that unwinds itself in a good topic and connects and unifies its parts.

24. Ideas Spring to Life. It is often observed that a purposeful idea in the head of an energetic man has great capacity for collecting and organizing the facts and forces necessary to carry this idea into full execution. Hamilton's idea of funding the national debt caused him to plan a bank, a tariff and an issue of bonds, and the whole machinery of the nation's credit was used as a means of backing up this idea. Daniel Webster said of Hamilton, "He touched the dead corpse of the public credit and it sprang to life." When a teacher touches any important school topic, it should spring into life. Ideas are active, powerful organizers, and a type study is nothing more nor less than an organization of knowledge along the track of a developing idea.

In this conception of the type study as a knowledge organizer is found the secret of the teaching art, the force that energizes thought and holds the attention of children. All true study has in it this dynamic energy and this strong organizing tendency. Otherwise instruction becomes aimless and scattering, and is even a weakening and disintegrating influence. This energy is always seen in a good story, in a drama, in a poem or a novel. It is a specific quality of all wide-awake instruction.

It is advisable that all teachers should thoroughly master the facts and organization of these large topics, as they are demonstrated in PUBLIC SCHOOL METHODS. It will give them a clear and practical conception of the foundation of all good teaching, in progressive, well-organized thinking, in big type studies agressively developed.

25. Three Features. The well-organized, developing type study has in addition to this life-giving energy three outstanding features that recommend it to the teacher's serious attention:

A LIVING EXAMPLE. First, and very important, is the concrete, objective character of the study. It always begins with a living example, an impersonation of the idea in a life form, as a striking and unequivocal manifestation of the fundamental idea, as Daniel Boone, the type of bold explorers; the oak tree, a type of forest giants; De Witt Clinton, energetically working out his idea of the Erie Canal; Edison, experimenting and working out his idea of the electric light.

The first stage in working over a good type study is always an elaborately wrought out life picture of a single forcible illustration of the idea. It should be a complete and unanswerable demonstration of the idea, so powerful and convincing in its effect that its full meaning can never be lost. This calls for consummate and masterly treatment, an expanded and powerfully reënforced object-lesson. Such work graphically and intensively wrought out is a masterpiece of good teaching. It lays the foundations sure and strong in self-evident facts and clear, necessary conclusions. On such a foundation later instruction can build something that will stand, because the child himself has thought out the problem on its own unanswerable concrete basis. A few things well taught in this fashion, for example, the type study on the Panama Canal (see Vol. IV, p. 403) will go a long way toward making the child a real student—a thinker.

A KEY THAT UNLOCKS MANY DOORS. The second stage is the expansion of this same idea into a larger field, the introduction of other illustrations, equally convincing and reënforcing the same idea in new and unsuspected demonstrations. It is a marvelous thing in study to find that you have picked up a key that will unlock so many doors, reveal so many secrets and interpret the great world in so many important aspects. The Yellowstone Park (Vol. IV, p. 435) is a wonderful region, spouting with geysers and rich in lake and mountain scenery, but more wonderful yet is the discovery that the United States is profuse and liberal in such scenic displays, as in the Yosemite Valley, Mammoth Cave, Glacier Park, the Grand Canyon of the Colorado, the Sequoia grove of giant trees, and Niagara, not to mention dozens of others in mountain and on the seashore.

CITY WATER SUPPLY. The importance of this second stage in the growth of an idea comes into far greater significance in dealing with social and human problems. If we make a study of the water supply of Chicago or of Washington or of the home town, it soon expands into a convincing proof that all towns and cities must have this same provision of a pure and unpolluted water supply. In every home, in every farm, in all villages and cities, large and small, the same fundamental need exists, and we find ourselves in the presence of a universal necessity in our modern progressive civilization. Moreover, we learn a practical lesson: danger lurks in every home and in every community, threatening the health of every family, unless positive intelligent and even scientific knowledge is properly applied to this problem.

A still greater surprise awaits us when we find that all the important topics in the main content studies demand this second stage of enlargement, this expanded application of an idea, to show its larger scope and significance. In fact, this stage is the process in which thoughts are elaborated into their true meaning, and, without it, knowledge is not only incomplete and fragmentary, but also lacking in home applications. It fails to function, to show its proper use in the affairs of daily life.

THE PERMANENT ASCENDANCY OF SUCH IDEAS. In the third place, such an expanded, intensive treatment of a subject deepens the meaning and enlarges the scope of an idea until it acquires a strong ascendancy in the mind. It works over into a habit of thought, a definite mode of interpreting the world in one of its main aspects. The teachings of the school thus carry over into later life and continue to operate. Such ideas continue their growth through the whole course of life; for life keeps revealing itself in new aspects with reference to this idea. Life itself is a continuous expansion along a few fundamental lines. Education is for life and for the whole of life. The topics most worth studying with children are those deep-seated, far-reaching ideas which carry through to the end, and life is worth living because it perpetually shows up these same ideas in new relations and with deeper meanings.

Such fundamental types, expanding through these three stages and reënforced in each stage with a powerful increment of organized knowledge, have been called *world builders*, because they construct on a large scale the framework of the child's thought-world, the world as he sees it and understands it.

26. A Simplifier of Knowledge. The type study elaborated on this extensive plan is a marvelous simplifier of knowledge. The greater the scope of knowledge materials brought together for the interpretation and expansion of a single idea, the more dominant and universal this idea is seen to be. In this way the child is rapidly climbing to the few mountain peaks from which the world and all its kingdoms may easily be surveyed. Such comprehensive surveys based on rich experimental knowledge, built up from the very beginning out of demonstrated facts and conclusions, constitute the foundation walls upon which all later developments in knowledge may be safely built.

PUBLIC SCHOOL METHODS has adapted this plan of deep, fundamental type studies, and it furnishes a goodly number of such topics elaborately expanded and closely organized, as unmistakable demonstrations of this method.

27. Inductive, Deductive. It would require but a short argument to prove that this whole plan of large type studies is merely an exemplification of the inductive-deductive process in teaching. It is a series of big object-lessons, in which inductive modes of thinking and study are properly combined with deductive processes, because these are constantly interactive in all true modes of study. It is only by an elaborate presentation or study of concrete examples, followed by reflective and comparative thinking, that induction and deduction can be strongly combined. The brief method of skimming over big and little topics is destructive to all true thinking, both inductive and deductive.

28. Basis for Teacher-Training. If the developing process of learning exemplified in the large type studies is correct in its fundamentals, it furnishes a reliable basis for teacher-training. The more studies of this sort a young teacher masters in their full descriptive content and organization, the more rapid will be his advance in the art of teaching, at least if he tries to apply them to classroom studies. The outlines and suggestions as to method which precede these type studies may also contribute valuable help to the teacher in appropriating the methods involved in such large topics. The developing organization found in one of these type studies, like the Erie Canal (see Vol. IV, p. 415) or the Iroquois Indians (Vol. V) is a lesson plan on a large scale, extending through a series of lessons. It gives the essential drift through a large topic, and the natural pedagogical sequence springs directly from this.

29. Effect on Children. It will be important to observe how far such big topics, elaborately worked out, suit the interest and mental capacity of the children. This will be the final and conclusive test of any such plan of organizing and handling of the school studies. Much experimental testing has already been applied to these type studies, and the result has been encouraging in a high degree.

In reality, the peculiar distinction claimed for this mode of handling type studies is that it best fits the impulses and needs and mental attitudes of children. The abundance of picturesque and illustrative data in the first stage and the enrichment of collateral and reënforcing studies in the second stage provide the appetizing thought material peculiarly appropriate to children. The lack of these enriching elements of study in our condensed book-material is what has produced a dull and lifeless uniformity in many studies.

30. A New World of Experience. In such expanded studies of important topics we are laying the ground-work for a child's thinking and growth in knowledge. Every such complete study opens up a new and commanding field of experience. By the time he gets through with it he should feel it as a genuine achievement, and as opening up a new world still more promising in its allurements. Evidently we expect great things from the proper study of great topics. But experience has proven the feasibility of this plan of large, enriching, inspiring studies. We are past the stage of experiment in these matters, and the studies have many times proved their adequacy in securing the results named. In these volumes we have presented an interesting and extensive variety of these type studies—biographical, historical, geographical and scientific. Literature in its stories, ballads, dramas and other masterpieces illustrates the same successful use of big units of study.

PROJECT TEACHING

31. Energy with a Purpose. The working out of *projects* has been recently emphasized as a mode of study calculated to improve our teaching of school subjects. The project is a phase of the type study, and perhaps is its most important phase.

The project thoroughly worked out through the two stages already described (first, the concrete exemplification of the idea, and secondly, the expansive development of this idea) is probably the best form of organized subject matter in studies that has been yet devised. It has certain strong characteristics deserving of special stress.

First, the dynamic power in stimulating independent effort on the child's part is a great asset. A strong purpose, fitting into a positive need, energizes effort. De Witt Clinton at work on his Erie Canal project is a convincing example. Whole-hearted devotion to the achievement of this purpose is the moving force in such a project. A child's effort to make a sled for use on the snow-covered hillside has in it just this kind of purposive energy; Edison in his persistent experiments on the electric light is another example. Big social and industrial projects are backed up by this same quality of persistent energy, as the project for harnessing the water power at Niagara which developed into the present power plants.

If this kind of energy can be turned loose in the schoolroom and caused to find outlet in a variety of projects involving the school studies, we shall be able to use to advantage a large amount of child energy that is now going to waste in schoolrooms. For children work with vigor and abandon on real projects, whether they be their own individual projects like making a telephone, or a baseball diamond, or other social enterprises like schoolhouse decoration, or a swat-the-fly campaign, or whether it be a city project for getting a pure water supply, or a whole people building the Panama Canal. The interest of children in great public enterprises, like laying the first Atlantic Cable or building an enlarged harbor for New Orleans, is powerful and dynamic.

32. Projects in Real Life. The studying out of these energetic projects in the big world just outside the school, and the complete and interested absorption of the children in the difficulties and constructive problems involved, is the nearest approximation to real life that the school can devise. It brings about an identification of the child's spirit with the great public and social spirit of his time. It is along this line that children can develop into real citizenship, into interested participation in many social and national projects.

A number of examples of this sort of life projects have been worked out elaborately in PUBLIC SCHOOL METHODS, such as the Erie Canal project, Irrigation in the West, the story of Columbus' first voyage, the Louisiana Purchase, the building of Petrograd by Peter the Great, Franklin's experiment with the kite, Fulton's first steamboat and Watt's steam engine are such projects. Many others of intense interest can be mentioned which have in them a strong appeal to the enterprising, investigating and constructive impulse in children.

The development of coöperative effort in such undertakings in which a group or whole class of boys and girls plan out and execute a scheme of progress or improvement is one of the best features of the project plan of study. This kind of enterprising project is now showing itself in progressive schools in a variety of significant ways, as in organizing a clean-up day about the school or about the home, in making and working out a plan for schoolhouse decoration, the organizing of the school into a society for self-government and for the parliamentary discussion of laws and regulations, for the election of officers to carry out plans, etc. The school garden is always a fruitful means of developing individual and social projects. A plan for dramatizing a story of Robin Hood or a scheme for establishing and equipping a playground illustrate the project idea.

33. Co-operative Study. This kind of coöperative social energy can be turned loose upon the investigation of important type studies in the regular school exercises—just such type studies as we have been talking about. The study of a cotton plantation, of raising, ginning, baling and shipping cotton, the fight against the boll weevil, the utilization of by-products once thrown away and shipments to foreign ports are all problems to be investigated by different members of the class. They are reported on, papers are prepared and submitted for class discussion, maps and illustrative pictures are brought together and put on exhibit, and the whole subject is developed as a coöperative study-project. It can be carried still further by going into the manufacture of cotton products, first in England, afterwards in New England, and later still in the Carolinas and in various parts of the cotton-producing South. Inquiry can be extended into other cotton-raising countries, as India and Egypt; and the comparative advantage of different countries may be investigated for the production of the great staple.

In this discussion many problems are met, and debatable questions arise. Both sides of such doubtful issues are worthy of full presentation. Comparison should also be made with the production and use of other textiles, as wool, linen and silk, and the relative importance of these textiles determined. Questions may arise regarding the relations of laborers and managers in the mills or between plantation owners and their tenants in the cotton belt, which will deserve consideration and study.

34. Well-Guided Discussion. To carry out this kind of coöperative lesson planning and discussion in project-studies it is necessary to have good supplementary reference books, in history and geography, in science and literature. Children must have suitable materials and tools to work with, and in such cases the teacher should be the guide, whose advice is frequently needed to indicate where to look for suitable information. In all such studies there can be endless waste of time and effort in irrelevant studies and in the discussion of minor issues. Children should be allowed freedom, but they should learn also how to keep themselves within reasonable limits in discussion of important topics. This holding to essentials in discussion is a necessary part of coöperative free discussion. The teacher needs to be well-informed, well-balanced and deliberate in judging values and well-grounded in the basal organizations of knowledge. Good teaching does not consist in allowing children to run wild and wander at will over a subject.

35. Avoid Waste. Well-organized type studies or projects already laid out and developed on fundamental lines are a necessary preliminary to such coöperative project teaching. First of all, they furnish the teacher with fundamental essential organizations and well thought out, developing processes, founded on a life experience in such projects. The children are growing into these new experiences and require guidance; otherwise they will run into all extremes of irrelevancy and distraction. Good teaching in such cases is a combination of freedom with wise direction, so as really to achieve the important results involved in such projects without extravagant waste of time and effort in the process.

36. The Realism of the Project. The project is the strongest protest we have yet found against abstract and merely formal teaching. In its very nature a project is a concrete, individual undertaking. It deals directly with a single life-situation. It is cotton raising, not in general, but on a particular plantation by a single person with'such aids as he can gather around him. It deals with irrigation, not all over the West, but, for example, on the lower Salt River Valley, and uses the water from the floods and reservoir of that particular stream. It deals not with road building across the mountains, but, let us say, with Boone's wilderness road, which he laid out across Upper Tennessee Valley over the Cumberland Gap and down the Kentucky River. There is no way of reducing a project to a lifeless abstraction. It is incurably concrete and individualistic. It sticks fast to the live specimen. It begins and ends in an individual experience. It is a part of real life, and cannot be separated from it.

When a project has been worked through to a finish, it may then be compared with other kindred projects, and conclusions may be drawn having a wider scope. In this manner the original project may become the basis for a continuous process of reasoning, by constantly drawing in new data and extending the range of objects or phenomena brought under survey. This process may lead to general conclusions of the broadest scope. The idea keenly expressed in the original project furnishes a sound basis upon which to develop this far-reaching conclusion. But if the intensive realistic treatment of this first project be left out, the whole reasoning process collapses.

37. Vital to the Core. This is no small matter—that is, to discover a kind of instruction that is vital to the core, that has within itself an indestructible life principle, a vital energy that cannot be hung up to dry and then be put on exhibition as a bald abstraction or definition.

Far too much of our school instruction is of this parchment variety. It is not merely bookish; it is mummified bookishness. It has long since lost the savor of life, and deserves a place among forgotten relics. It consists in dull, commonplace abstractions.

The project is the exact opposite of all this. It is instinct with life enterprise and action, and is at home in the midst of energetic, progressive, purposive undertakings. An education based on projects is an education that constantly mingles in the stream of life and participates whole-heartedly in its schemes and achievements, whether performed in past or present. This is the real thing that we talk about when we speak of education for citizenship. The project feels and expresses the pulsations of life, springing from the centers of social activity, that is, in political, industrial, and progressive enterprises, where social forces are brought into full action. These intenser experiences constitute the basis of education.

38. Basis for Principles of Instruction. The first-class project furnishes a focusing point and a central line of action where the important principles of instructional work can be combined and unified into one great process. The inductive mode, combined properly with the deductive, finds in this process its complete realization. The first and second stages already somewhat fully discussed in the type study or project are themselves the full demonstrations of this inductive-deductive movement in thought. The minor principles are easily worked out on this basis; this plan has been fully explained and demonstrated in type studies and projects and in theoretical discussion and argument. It will be a great day for education when we once get this conception well established, namely, the absolute need for the fully-developed type-study-project as the standard unit of instruction. Such a large, fully-organized, elaborately-expanded teaching unit, when once recognized in its full meaning and scope, will solve several of our large teaching problems. For instance, it will help us to select and organize a sound course of study; likewise, it will form a safe basis for classroom instruction and for the training of teachers in the teaching art.

The effort to compress these big topics into brief summary statements and to condense them into outlines is the one great influence that has played havoc with our instruction, and it will continue to nullify our best efforts in teaching until we break away and discard these barren outlines.

Every important topic in school studies that is worth teaching at all deserves a full, rich setting, a complete exemplification. It should have time to make a convincing and lasting impression, so as to form the beginning of a strong habit of thought. A few such basal studies well done are worth far more than a multitude of little things poorly done or half done.

PUBLIC SCHOOL METHODS has set the example of handling a full number of large teaching units in a thorough-going fashion, and has thus given the demonstration of what good teaching may accomplish.

It is commonly admitted that this enrichment of school topics with well-organized, concrete data is indispensable, but great difficulties lie in the way of getting this kind of illustrative data into the hands of teachers. The vast majority of schools are destitute of good libraries and of supplementary books. Most teachers have no resource except their own very limited experience. PUBLIC SCHOOL METHODS is exactly designed to bring relief in this difficult situation, to furnish teachers with simple, tangible and appropriate material with which to illustrate and enrich the regular school studies. It is a compact library of helpful subject matter on all the school studies.

NATURAL CORRELATION OF STUDIES

39. Deeper Correlation. In harmony with a general demand for a closer grouping and organization of studies PUBLIC SCHOOL METHODS furnishes many instances of practical correlation between studies. For example, language exercises are reënforced by selected poems, by biographical stories, by excursions in science and geography. History lessons and geography play into each other's hands almost constantly. Drawing contributes to a clearer expression of ideas in nearly all studies. Constructive devices gained in the industrial arts help to work out models in geography and science.

The problem of correlating studies in a proper organization of the whole group of curriculum materials is of profound significance and means far more than setting up of chance connections between studies, or even of frequent cross relations among them. Correlation, in the deeper sense, is based upon a fundamental organization of studies, an organization such as has been demonstrated in the larger teaching units or type studies. Correlation has been much talked about as an accidental and superficial discovery of chance relationships.

40. Three Studies Closely Combined. A true correlation is that which is vital and inevitable between studies and cannot be neglected without doing serious damage to the meaning of the things under discussion. For example, the Lewis and Clarke expedition to explore the newly-acquired Louisiana territory in 1804 was a historic achievement. It was also geographic and scientific in its fundamental character. History, geography and science are vitally brought together and so closely combined that it would be folly to separate them. Maps and sketches are necessary at every stage, showing the physiography of the regions passed through. The study of plants and animals and mineral resources are of equal importance. The climbing of mountains, adventures with bears and Indians, the climatic conditions and changes, the notification to the Indian tribes that the United States government was now in control in those regions—all these, mingled into one practical expedition, are part and parcel of one undivided larger unit of study. This kind of close correlation is fundamental to any proper study. We are not compelled to search for connections or to invent relations, but simply to see and understand things in their necessary combinations just as experience in such a journey of exploration yokes them together. This brings things into combination in their proper life setting, causally related and tied together.

The Louisiana topic is one of the large type studies; it illustrates what must happen in any complete development of a large unit of instruction worked out with full and adequate elaboration. If we once give ourselves time to think out a big topic in all its principal bearings, in its complete environment and life-setting, we shall see several strong reasons for regarding correlation of studies as a natural and inevitable mode of study. In proper teaching, correlation takes care of itself. It is unavoidable, if the right subject is given a thorough and full consideration. Many examples of this are furnished in the type studies distributed through these volumes. We have been led to overlook this deeper phase of correlation because the usual treatment of topics in school studies has been superficial and very brief, not deep and penetrating so as to discover the deeper root connections between studies.

41. Meaning Depends on Relations. The intensive treatment of important types, by which we organize a rich and varied collection of data around a central developing theme, has opened our eyes to the productive character of school subjects and especially to the deep and wide-reaching connections and interpretations involved in such correlations. The real importance and meaning of a topic depend wholly upon the extent and variety of profitable knowledge—material brought together and unified into one comprehensive grasp. We have already called attention to the necessity for the elaborate concrete and descriptive fullness of treatment necessary in such a big object-lesson or type study. The failure to introduce this rich and attractive material into important topics, the tendency to cut out descriptive and inviting details, has reduced these subjects to meager and sapless outlines, in which we fail to detect important relations, because there are none to be seen. Relations can be seen when the facts upon which the relations are based are at hand, but when these facts are left out, no conclusions can be drawn. Above all things, we must have a rich and abundant and pertinent body of facts upon which to spin the thread of relations. We must trace cause and effect from fact to fact through a close sequence of connected events, or we shall never know that there are causes and effects. The rigid outline character of much of our study material and the crowding in of numerous general statements without any support from facts have made it impossible to see relations or discover wider meanings. As a result, thoughtful teachers have often complained against the necessary memorizing of much dry and meaningless material.

42. Abundance of Closely Related Facts. This theory of rich and well-organized knowledge, full of relationships grouped into big topics, is frequently illustrated in PUBLIC SCHOOL METHODS and should never be lost sight of by the teacher. We have long known that good thinking consists in seeing *relationships*, in discovering likenesses and contrasts, in grouping and combining large masses of experience into organized wholes, which can be seen through and grasped as units. How then can we expect children, or anybody else, to think without an abundance of related facts? The large teaching unit is nothing more nor less than a steady, progressive organization of related facts growing toward one consolidated and comprehensive conclusion. Children will think splendidly, if we will but furnish them the stepping stones upon which they can march steadily toward reliable conclusions. Our diluted and scrappy school topics do not permit connected thinking.

43. Cloistered Isolation of Studies. The trouble is that our school studies heretofore have been organized on the principle of *isolation*, each study standing squarely on its own feet and not even looking over the fence at possibly kindred subjects.

Each school subject has been kept rigidly within its own fenced boundaries. Each subject in some cases is taught by a separate teacher in a separate room, from a separate book. Many teachers, in consequence, have supposed that this cloistered isolation of each study was a necessary part of the scheme of education and that any effort to combine studies would produce confusion.

44. Co-operation Necessary. The effort therefore to bring about a close coöperation of studies, a friendly joining of hands in mutual support, has against it the whole weight of traditional method and an organized isolation of studies. An isolated drill on special topics is often advisable. The isolated treatment of a single topic, or of a whole study for a short time so as to master certain elements, is often necessary, but the next vital step is to renew the connection with the old friends, the other studies. For the final outcome of all study is coöperation, not isolation. For example, we may study in the class in English a lesson in pronouns, but the final purpose of such study of pronouns is the correct, every-day use of pronouns in all other studies and in life. Even geography and history have their chief value not in themselves but in their direct contribution to certain life problems of the present which require the coöperative wisdom of all studies to solve. The reason why we study language at all is that we may get such a mastery of its elements that we can use them quickly and easily in other studies. This same principle applies to all studies. We acquire knowledge in any study for the single purpose of putting it into service wherever needed in the whole range of studies and of experience.

45. Religion. In religious education we meet the same difficulty. Sunday is set apart as a day for religious service and thought, and the services of the Church may indeed be an elevating and superb expression of religious truth. But no one has advocated that this Sunday isolation of religious truth meant that religion should be kept apart from thought and action during the other six days of the week. Indeed, the chief obstacle to religious progress in the world is the failure to carry religion over into Monday, Tuesday, etc.

A permanent isolation of studies from one another is therefore unnatural and to be deplored. Such a theory of education utterly fails to meet the needs of life. It is thoroughly artificial and unpractical. It is wholly misleading.

46. The Panama Canal an Example. The large teaching unit or type study is a natural agency for combining into a larger whole a variety of knowledge materials gathered from several studies. The Panama Canal project, as a colossal type study, exemplifies this outstretching power of a big subject to seize upon and appropriate to its own purposes many kinds of knowledge from all studies. It seems primarily to be a history topic. At least the main idea has been developing through successive stages four hundred years since Columbus's time. The actual planning and construction of the canal was one of the important achievements of the Roosevelt administration. It will forever stand as a great historical achievement; but it plays an equally important role in geography. The plans for its construction involved a full acquaintance with the physiography and climate of the canal zone, and its whole purpose is to facilitate and cheapen commercial exchange about the world and between the oceans, on a grand scale. In planning and constructing the canal scientific knowledge and invention were in constant demand in numberless ways. The sanitary cleaning up of the canal strip was carried out at an expense of twenty million dollars and was purely scientific in plan and method. The machines used in dredging, in blasting out the Culebra (now Gaillard) Cut, the electric engines used in a hundred ways in the processes of construction and the present management are products of the most advanced scientific invention. Without modern scientific ideas and appliances the canal could never have been planned and built. The government of the United States employed its best diplomacy. Congress discussed and approved the final decisions, and the President appointed the men who were qualified as administrators and engineers wisely to carry forward this great undertaking. It is a big topic in civil administration.

About five thousand skilled leaders, scientific experts and managers directed the activities of 40,000 workers, who came together from many countries and races—East Indians, negroes from the West Indies, Italians, Spaniards, Chinese and a few other nationalities. It is a practical study of many races of men, their physical and mental efficiency and working power. This is a very meager list of a few of the important agencies and persons and resources which were brought together and coöperated through a period of nine years till the work was completed. At an expense of nearly four hundred million dollars all the resources and knowledge of a great nation were made available for this achievement. An effort to isolate these various topics according to school studies and to treat them separately would be a piece of stark foolishness.

47. Every Big Topic Correlates Several Studies. It would be impossible to treat the Panama Canal exclusively as an historical topic or as a science topic. It requires both of these in close conjunction. The theory of isolation of studies into separate compartments is wholly inapplicable to the Panama Canal The same conclusion must be drawn with regard to other large teaching units, such as the building of the first Pacific railway, the description of the large steel mills at Pittsburgh, harbor improvements at New York or Fulton's first steamboat on the Hudson. Such a large topic, with its broad scope, is sure to require important knowledge data from three or four different studies. The old classification of studies will remain for convenience in discussion, but the boundaries between them have to be broken down every time we undertake the satisfactory treatment of a big topic in any one of them.

48. The Cotton Industry. If we undertake to study the cotton industry in the South the mere list of sub-topics is a convincing proof of the necessary correlation of several studies. The cotton plant itself is a botanical specimen in its growth and life history. The cultivation of the crop is agriculture, the dealing with the boll-weevil is chiefly scientific, the cotton gin and the cotton press are scientific machines, the by-products of cotton are obtained by scientific processes, the shipment of cotton to the factories and markets is commerce and transportation, the study of labor problems in the cotton belt and the relation of whites and blacks is economics and sociology, the manufacture of cotton into textile fabrics with the numerous machines and inventions and its labor problems and mill-operatives, wages, hours of labor and factory sanitation deals with a large group of the varied subjects difficult to classify. In fact, there is no reason for attempting to classify and isolate these varied subjects. They belong together in one combined picture, one organized treatment of a practical occupation or group of occupations.

The more we look into it the more we are convinced that big topics are too complex for single studies. Now that we are compelled to deal with large topics, to organize our course of study to a large extent out of such material, we must be prepared to solve the problem of correlation.

49. A Reflex of Life Itself. One significant reason why big, practical units of study such as we have been discussing have such a wide range of correlations is that they are really life projects, that is, enterprises which reflect definite life situations, such as we meet in business, in social and industrial or economic affairs. Life itself pays no attention whatever to the bookish classifications of the schools. A farmer, for example, in working with farm machinery has to do with principles of mechanics; in combating chinch bugs he must know of insect life; in finding a sale for his wheat he studies markets; in selecting and testing his seed corn he uses scientific methods; in building a silo for feeding dairy cows he is thinking of the health and food of his cattle; in fertilizing his fields he resorts to scientific knowledge in several ways; in dealing with farm animals he needs veterinary knowledge; to meet changes in weather he watches the reports of the Weather Bureau; and he reads the agricultural journal to get information on scores of other subjects. The farmer gathers and uses knowledge from all sources, just as he needs it. But the same is true of the housekeeper, the business manager of a coal mine, or of a woolen mill, of a lawyer in his legal practice or of a merchant in running a store. Everywhere in life is this close interaction of knowledge from all sources, this intimate blending of experiences. The school is doing well when it imitates this process of unionizing studies, of compelling them to get into quick service in all conceivable ways, of ready adjustment to life problems and human needs. The school studies have been too aristocratic in their aloofness from one another and from life. The introduction and use of large practical units of study such as PUBLIC SCHOOL METHODS so often recommends and illustrates brings education much closer to every-day needs.

50. Relations Extending in Two Directions. The expansion of one of these practical topics into large dimensions and into extensive correlations is found to be necessary for two cogent reasons. First, because there is a progressive, genetic development in such a purposive enterprise which leads often through an extensive sequence of valuable topics, the chief stages in the essential growth of the subject. The whole topic stretches itself out longitudinally into a strong, necessary and logical sequence. The natural scope and importance of the subject demand this lengthened sequence and a full understanding cannot be gained on any other plan. This is what we may call the practical and logical process of carrying through a projected line of study to its legitimate conclusion. In the second place, the subject spreads out laterally to find its proper relations and setting. The side lines, branching out from the central topics, are quite as important to the proper interpretation and balancing of judgments as the main longitudinal sequence. A big topic requires considerable breadth as well as length to exhibit its full meaning and influence. This explains the need for descriptive fullness, for concrete embellishment, for artistic balance and finish. These cross-lines in thinking give a topic its proper setting in life, its vital relations to the whole field of experience. When both these requirements have been fully met, we have a complete and standard organization of subject matter.

51. Economy of Time and Effort. One of the curious results sure to come from such an extended development of a big topic is a surprising economy of time and effort in study. A large amount of time spent in the elaborate and masterly study of a single topic with a broad scope and a typical import is not only well spent but is a pronounced conserver of time and energy. Because no time is wasted on meaningless facts or on formal phrases, because every blow counts, every fact is seen in its true relation and meaning. Such work well done and mastered never has to be done a second time. It has settled itself through full assimilation into the mind with a clear meaning and a permanent conviction.

52. Teachers Broad-Minded. Teachers who wish to have a solid basis of rational thought underneath all their instruction should make a study of this problem of correlation. This increasing demand for closer combining of studies, for a social coöperation among all branches of knowledge to the ends of life, lays upon the teacher an obligation to be broad-minded. No teacher can afford to be merely a teacher of arithmetic or of language or of history and cut off the connections with the rest of the world. This is a kind of narrowness that cannot be tolerated in teachers. The teacher of any special subject may well spend half his time on the special data and principles of that subject; the other half of his time should be spent in following out the life-relationships of his narrow field to other phases of the great world of experience. This will give him a proper balance of mind, and nothing else will. To shut himself up in a small compartment in one study and then build high fences to shut out the rest of the world is a sure mode of self-extinction.

MOTIVATION IN SCHOOL STUDIES

53. Old-Time Motivation. In recent years we hear much about the motivation that ought to be present in school performances. By this is now meant purposive study from the standpoint of the child, the voluntary devotion to school work, because the child himself is impelled to work out some desired end or achievement of his own choice. The advantage of such motivation is apparent because the child becomes his own taskmaster. He is self-active and self-determined. As he grows older he will need more and more this power of wise self-determination.

The old-fashioned school had plenty of motivation. A bunch of good stout whips or birch stick just back of the teacher's desk were designed to exert pressure where it was needed. "Lickin' and larnin'" were supposed to go together; to all intents and purposes they did, and they came in regular rotation. The authority and will of the teacher set up such motives as seemed to be effective, and considerable serious study was really accomplished by this method. There were always some children perhaps who did not require this coercive stimulus to study but instead found satisfaction in the school exercises. This pressure of external authority as a necessary means of motivating studies was reënforced by the theory of severe mental discipline; the more painful and severe the effort, the better the training. This idea has survived down to the present and is still enforced on a large scale.

A milder but similar external pressure was exerted by a system of marks and ratings. The ambition to get good marks and to have the credit for a high standing has always been a powerful stimulus to many students, while the negative impulse to avoid disgrace and failure was an equally cogent motive. These external reënforcements of study are not to be compared in educative value to the strong impulses and motives that may be awakened in the child himself, the arousing of his own conscious purposes and energies for the accomplishment of worth-while results.

54. The Center of Gravity Changed. With the growth and adoption of better and more humane ideas in education, real child study and greater consideration for children have come into vogue. We are considering more and more the natural impulses and periods of growth and mental development in children and less the mere formal studies. We consider also the wide differences and variations among children in mental caliber, in tastes, inclinations and talents. To a certain extent we look to the children themselves for guidance in the choice of lessons and activities. We even go so far as to say that the center of gravity in the matter of motivation should be transferred from the teacher to the child. As fast as the child develops intelligence and self-control he should be given greater freedom and a wider range of choice in his studies and actions. In all these matters the schools have become far less arbitrary and dictatorial. There is not only a milder treatment of children but a more genuine respect for them, for their rights and endowments. The schoolmaster is not merely an autocrat who imposes tasks and enforces discipline, but a friend and guide, a wise director of studies and, if necessary, a critic and respected mentor.

It was discovered and gradually brought home to teachers that children might take pleasure in their school studies. Even arithmetic and grammar might have attractions for some pupils. Studies are not necessarily irksome and disagreeable. In fact, literature, historical biography and geography, in different ways, are highly stimulating subjects to many students. Moreover, the school is entitled to physical activities in shops and on the playground, in the gymnasium, in garden and in domestic science rooms. In recent years the activities of small children in games, rhythmic dancing and in constructive efforts and in dramatics constitute a large part of the schoolroom activities. Thus are satisfied the powerful natural impulses of children for motor expression, for running and jumping, for outdoor excursions and for many kinds of games and physical occupations. Great changes have taken place in the school in affording free activities and modes of self-expression in nearly every kind of study.

55. The Doctrine of Interest. About twenty-five years ago the doctrine of *interest* came into much prominence as a vital factor in the training of children. Interest in studies was set up not only as a means of stimulating effort in studies but also as a much desired result or goal. A permanent interest in science or literature, in geography or history was declared to be one of the most desirable achievements in education. This notion of the legitimate and lasting interests awakened by studies when properly selected and handled has found its way into all of our educational plans and modes of thought. It has much to do with the motivation of children's studies and with laying out courses of study.

56. Deeper Forces in Child Life. This shifting over to the emotional side of a child's life, to a real regard for his desires and interests, marks a complete change in the purpose and character of education. This plán reaches down much deeper into a child's nature, into his natural interests and affections, to his fundamental human impulses, to his own initiative and self-determination.

The school studies acquire a new significance. They become the channels through which the strong impulses and feelings of the child flow. It is through the studies that these vigorous and abiding interests are awakened and strengthened, which in time become the strongest motives for effort. Whole courses of study have been planned and tried out with the one purpose of molding character through the cultivation of the better classes of interests spontaneous in child nature. At any rate, the fundamental doctrine of cultivating a child's native interests as a basis for knowledge and character development has come to hold a leading place in our educational theory and practice. We have at last gone over onto the child's ground, the place where his affections are enlisted and made efficient for educational ends. This is genuine motivation.

57. The Story. The discovery of the story as an educational instrument has wrought wonderful changes in the school. This is because it fits so closely the child's natural instincts and interests. The kindergarten took it up first, and the primary school has made it an essential part, a vital part, of the early studies. Together with games and constructive activities, the story has redeemed and rescued the primary school from dull formalism. And now we are beginning to find in the story suited to older children an equally valuable means of vitalizing the studies in intermediate grades. This is indeed an entering wedge for improving all the studies of these middle grades, the language work especially, but in full measure the history, geography and literature.

58. A Pedagogical Treasure. The first-class story is a pedagogical treasure, because it gives a picturesque life setting to an idea or theme that completely absorbs the child's interest. It organizes around this center of interest all the knowledge-material necessary to give it a full natural environment. That is, it is a convincing object lesson and demonstration to the child's own full satisfaction. It is a complete pedagogical achievement, and as an expression of the child's own judgments will never lose its power. A well-rounded story is one of the best illustrations of a genuine type study, embodying a fundamental thought. The select story moves progressively toward a destined end upon which the thought can be organized and directed. The central motive can be developed in orderly sequence. The story of Robinson Crusoe runs through a series of projects which develop under the strain of a life situation. Such a story works out a dominant trend into a series of problems for the child. The same is true of the story of the exploits of Ulysses and of Daniel Boone's adventures.

59. Interest in the Problem. Quite another form of motivation is furnished by *problems* in arithmetic. They present a difficulty to be met and mastered by the child's own effort. Arithmetic has long been the problem-solving study *par excellence*, the standard subject for offering children a chance to do their own thinking. The motive employed is the impulse to solve the mystery. There is an appeal also to the child's stubbornness of will, the determination to win out and solve the problem, no matter what the difficulty.

60. The Investigating Spirit. Still another form of motivation was put in service in connection with nature-study and science, in experiments in physics, chemistry and biology. The investigating spirit is put on the trail of some supposed truth or error, some hypothesis or guess. In the garden experiments are made with plants and soils. In the laboratory chemical reactions are tested out. The lure of the unsolved problem draws on the scientist, and children, in the simpler phases of nature study, feel the pull of this investigating spirit.

In these various ways motivation of school studies has been introduced, and the children themselves find opportunity for self-reliant effort, for thinking ahead, for planning and executing schemes of their own. They are all preliminary efforts to develop self-activity and initiative. It is not difficult to observe and conclude that education tends toward greater freedom of action and more free choice and self-determination in all phases of school work.

This is evidenced by the fact that in recitation and study of every kind we are disposed to set up intelligible ends which command the interest and voluntary effort of children. There is less of dictation and of arbitrary assignment and more of question and problem. Such instruction demands more intelligence and foresight and ingenuity on the part of teachers than the old regime, with its fixed and formal requirements.

61. The Project. The project, as a purposeful enterprise involving difficulties and requiring deliberate foresight and wise planning, is the latest and completest form of the motivated lesson or series of lessons. There are certain subjects in which the project comes to the front as the main and essential phase of study, as in shop-work, with its well planned construction and careful executions, or in domestic science, with its practical and definite undertakings in sewing and cooking, and in agriculture, with its many farm enterprises of the strictly project type.

The smaller projects which children voluntarily undertake for their own satisfaction, as making a kite, building a dam in the brook, constructing and using a tree house or going on a camping trip, are types of self-activity in which the school has become much interested, and in its own shops and workrooms it imitates such varied minor projects.

62. Big Projects. In the active world of business, of agriculture, of city improvement, of state government, larger projects of communities and states are now often made the subject of study, as the construction of bridges and elevators, the founding of colleges, the drainage of extensive swamps, the building of ships. These larger projects in their beginnings and development and in their results become strongly interesting subjects of study. They hold out great inducements to the thinker. They are tangible objective demonstrations of the great enterprises that modern society is engaged in producing. Sometimes they are historical projects, executed hundreds or even thousands of years ago, as the Pyramids, the Great Wall of China or the Colosseum. History itself in its strongest manifestations and in its great typical enterprises and reforms has been a series of projects backed by great energetic characters, as Raleigh's projects for discovery and settlement, Drake's voyage around the world, Hannibal's march against Rome, the reconstruction of the walls of Jerusalem by Nehemiah.

63. Effects upon Teachers and Pupils. PUBLIC SCHOOL METHODS furnish a scheme for bringing these minor and major projects to the front, giving elaborated examples of such projects in the different studies and showing the motivation of school exercises in its strongest form. There can be little doubt that the best line of progress for the improvement and organization of school studies has been found at last in this proper working out of well chosen projects. It is a form of instruction that appeals to the stronger motives of teachers as well as of children. The selection and working out of these typical projects opens a wide and inspiring field of effort for teachers. Indeed in the pursuit of such plans the teacher may make the most notable progress, both in academic scholarship and in professional skill and efficiency. Of course, the underlying purpose is to awaken self-activity and initiative in children, to place the whole incentive for effort in the child's own spirit and to relieve the teacher of the responsibility of doing the child's work for him. Let each child develop into a self-propelled, intelligent worker, with clear views as to what he is driving at and strong personal motives for accomplishment.

THE SOCIALIZED RECITATION

64. Coöperative Social Management. A form of instruction that has come into vogue of late but is vague and doubtful in the minds of many teachers is known as the *socialized recitation*. It is a coöperative effort of the children to manage their own affairs, to conduct in their own way the processes of investigation and of discussion. It is not feasible to give children absolute independence in controlling the methods of study. Even adults in legislatures and in congress are guilty of an awful waste and of extravagant blundering when left to free discussion in their own way. Children are in the process of learning and of acquiring experience, and they require wise guidance, even where they are allowed freedom to direct their own affairs. It is necessary to have a prudent, well-balanced teacher in the background to intervene in quiet and in positive ways when circumstances so advise.

EXAMPLES. The school should, however, offer many opportunities for children in classes and as an entire school to assume leadership in directing their own projects. The management of a literary society by electing their officers and conducting debates and parliamentary procedure is a familiar example of this coöperation. To what extent can this method of organization be applied to class instruction? It has been attempted in a variety of ways, and has sometimes gained a marked success. It is a difficult thing to describe, because it is so variable, so subject to change and unforeseen developments. Freedom to do things in one's own way means uncertainty as to just how things are likely to be done. Sometimes for lack of wise planning they are very poorly done.

The organization of a school society (sometimes called a school city for self-government) to undertake projects of self-management in school discipline, or a plan for schoolhouse decoration, or the lay-out and equipment of a tennis court, or playground, or for debating and discussing a problem in history, such as the tariff, or the League of Nations, is not uncommon. Instead of the teacher taking charge of the recitation with questions and assignments, the children organize themselves into a study group, assign the parts, study up the references and report in succession under the presiding control of one of their own number. Sometimes children drill each other on special parts of the program. Sometimes the class falls into two groups which are rivals in debate or recitation, to see which side can present the better results. Then the leaders of each group will try to organize and direct the work so as to win in the contest. It develops leadership, coöperation, thoughtful planning, readiness and self-reliance in discussion and in handling information.

Such discussions are highly interesting and stimulating to the children and may even bring together valuable knowledge.

65. Wise Suggestions. Wherever this kind of coöperative study by children is carried on, the teacher is in the background always ready with advice and suggestion and occasionally with control. Indeed, there may be danger of the children depending too much upon the teacher, or, on the other hand, of the individual children being too wilful in their own self-determination. Children must learn how to regulate themselves, and this is one of the ways of doing it.

When this plan of instruction is undertaken, it is wise to select beforehand valuable topics for discussion. The large units of study which we have been discussing at length furnish probably the best themes for discussion. The type studies are just such large standard units around which discussions may wisely center. Information may be gathered from different sources, presented and disposed of. The fact that such a type study has a well-defined movement of thought, leading to important conclusions and capable of wide application is of great advantage.

If the children's study and investigation of a subject are to avoid a helter-skelter collection and scattering in many directions, there must be some controlling thought sequence which is held to and worked out to a finish.

The well-defined project is a very convincing demonstration of the necessity for this steady concentration toward a necessary end or aim. The project looks toward a practical achievement, and if it does not reach this result, failure and inefficiency stare us in the face. Projects are life enterprises looking toward worthy results, and failure is not one of these desired results.

BIOGRAPHY IN THE GRADES

66. The Personal Side of History. An examination of the volumes of PUBLIC SCHOOL METHODS will show that in developing the course of study from the primary grades on through the intermediate and grammar school biography is given an important place. In Volume Five, especially, the history course is elaborated and many biographical stories are introduced.

Biography is the personal and objective side of history. It corresponds to object lessons in nature lore and science. For children, from the third grade on, nothing can surpass the interest and mental stimulation aroused by a well-developed biography. A man or woman of strong personal qualities, showing himself in lively dramatic exploits, as Grace Darling or John Paul Jones, awakens the strongest response in children and at the same time leads directly into important historical situations.

67. A Good Biographical Story of Remarkable Value. A completely-developed, well-balanced biographical story, exhibiting a strong character in its complete life environment, showing power and resourcefulness in action, is one of the powerful instrumentalities in education. To bring such a character into the lives of children in its genuine quality, in its full, manly or womanly vigor and simplicity, is a remarkable achievement in educational experience. To bring such stories into form suitable for schools and to acquire the art of treating them up to their full merits in class instruction is putting to the front one of the best educational ideals that can be set up to kindle ambitious effort. Such a biography, well taught, sets up a high standard for educational efficiency. It is a complete whole, and as such, illustrates the type idea in teaching, because such a person is usually a distinct type, a representative of an idea.

As good examples of the outstanding biographical leader we may name La Salle among the French explorers, Sir Francis Drake among bold English seamen in Elizabeth's time, Richard the Lion-heart in early English history, William Tell in the legendary history of the Swiss, Sir William Wallace among the Scotch, Daniel Boone among our Western pioneers, George Rogers Clarke, sometimes called the "Hannibal of the West," William Penn as the founder of a state, Stark among the Green Mountain heroes, Sevier, the leader of East Tennessee. These are but examples of many.

Beginning among the earlier nations, we have a regular succession of hero stories. David and Ulysses; of traditional or legendary tales, Horatius and Alfred; of early myths, Theseus and Siegfried; of romance, Roland and Arthur; of explorers, Magellan and Frémont; of pioneer backwoodsmen, Robertson and Boone; of naval and military heroes, Lawrence and Perry and Anthony Wayne; of pioneer preachers, Eliot, Williams and Peter Cartwright; and finally, of statesmen and philanthropists, Hamilton and George Peabody.

68. American Biography the Best. It is of untold significance for us to know that American history is prolific in interesting and valuable biography. This is, indeed, a mild way of putting it. In the early settlements along the Eastern coast and in the later westward movements across the continent, enterprising and heroic leaders have led the frontiersmen. The growing states that sprang from the early explorations and settlements brought forth a remarkable number of sturdy, independent characters. The work of exploring and later of exploiting the resources of this continent bred up an ingenious and resourceful people. The rugged school of experience trained up extraordinary men and women, even when nothing better than rough-hewn log schoolhouses represented the educational system. The early history of no other country can display the stories of so many men who as occasion required could wield effectively the axe, the sword or the pen. Men like Sevier could take an Indian scalp or make a speech in Congress as the occasion required.

Many of the best history stories have already been incorporated into our common school course and have been distributed along through the grades from the third or fourth to the eighth. PUBLIC SCHOOL METHODS gives emphasis to this curiously valuable material by introducing many of the stories at length, as those of Marquette, Fulton, Eliot, Boone, Franklin, Jackson, Lee, Lincoln and others.

69. History Stories Combine History and Geography. We have already laid special stress on the close relation between history and geography and that an intimate correlation between these two studies is highly profitable. It would be easily possible to teach the major part of American geography as a necessary background for fifteen or twenty of the best American biographies, especially of the explorers and early settlers, as

Champlain and John Smith, Lewis and Clark, De Soto and Frémont. Two studies can be brought together and taught more effectively than either one by itself. This union of studies would increase their power and effectiveness and likewise economize time.

70. True Connection between Europe and America. Much has been said and books have been written for the schools to furnish what is called "the European background for American history." But the main point of contact between Europe and America is located in the life experiences of those men and women whose early lives were spent in England, France, Scotland and other countries of Europe and who came to America to found settlements and build up states, as John Winthrop, Roger Williams, Peter Stuyvesant, William Penn, Lord Baltimore, the Virginia Cavaliers, the Quakers, the Germans, the Scotch Irish and the French.

The full biographies of the leaders of emigration will bring us into sharper contact with the jarring forces, the religious and political struggles and the economic upheavals in Europe than any long and tedious enumeration of leading facts of European history. The early Puritans and Quakers and Baptists who came from Europe were deeply agitated, almost fuming with the political and religious controversies of those countries. The pot was boiling in Europe when they left, and their minds were still hot with the feelings and convictions generated by those intense controversies. The Puritans and Cavaliers transplanted their ideas and convictions to the soil of America and set up the standards for home and State and Church which they brought with them. Close and intimate contact with the leading characters of these migrations and settlements is the strongest means of cementing the connection between Europe and America.

71. Intensive Treatment of Biography. The intensive, personal treatment of these biographical stories, the exhibition of individual character by anecdote, adventure, outbursts of anger or sallies of wit, intense prejudices, personal affections and antipathies, faults and foibles, love of dress and display or carelessness, fearlessness in danger—all these and other means are used to get behind the scenes and secure true revelation of character. Casting aside vague generalities, it is necessary to plunge into the source materials which give unconscious self-revelation of personal motive, feeling and character. This kind of study is deep and penetrating and qualifies the teacher to expose the striking features of personality in a strong light.

72. **Eminent Scientists.** Biography requires this kind of intensive treatment, this intimate companionship with men of strong personality, so as to get the direct impress of their individual qualities. This suggests the vital elements that a teacher must put into historical teaching, the living over again of picturesque and powerful scenes in history. Biography in this manner touches up history with a dramatic interest, such as Shakespeare gives to Cromwell and Richard III.

Biography has a much wider scope than we have yet indicated. The field of science and the marvelous advancements of modern times in discovery and invention are most strikingly revealed in the biographies of eminent scientists. The story of Pasteur's life, revealing his patience and zeal and precision in scientific experiment with bacteria and the useful results he achieved, gives an insight into one of the most interesting developments in medical practice, besides other, perhaps equally important, applications of his discoveries.

For young people in the grades the biographies of men like Franklin, Audubon, Agassiz, Burroughs, Gray and Edison offer an introduction to such studies and to the fruitful results they brought about that is of the greatest significance for education.

73. **Author's Biographies.** The same may be asserted for literary men and women, such as Longfellow, Dickens, Scott, Whittier, Macaulay, Irving and others. A vital and personal narrative of interesting experiences in their lives may throw much light upon their writings and reënforce all literary studies. But all such biographies must be wrought out by those who know how to tell a story, how to reveal character by vivid flashes and suggestion, by grouping and combining experience

into striking and remarkable exhibits of famous persons and events.

74. Biography Many-Sided. Even autobiography has an important place, as illustrated in Franklin's life and in the letters of other authors and men of distinction.

From these various phases of biography it is evident that it is many-sided in its range and has a broad scope in the course of study. It is perhaps the best means we have for reënforcing and intensifying the teachings of history. There is, indeed, among thoughtful educators a marked tendency to depreciate the mere general outlines of history as dull and profitless and to resort to biography as a means of giving history a stronger hold upon children's minds, a more intense realization of historical events and their meaning.

It may be said also that in spite of this conviction of the need for complete and graphic biographical stories, elaborately and artistically wrought out, too many of the stories furnished in our school books are brief and scrappy, wholly inadequate as teaching units to produce the effects desired. A few biographies fruitfully worked out and graphically presented on a full background of descriptive experiences will serve the purpose far better than a large number of brief, condensed narratives.

It should be remarked also that our high schools and colleges are showing an appreciation of biography as a superior form and mode of instruction for adults. Some of the really valuable and inspiring university courses now are lectures on great men, presented with dramatic detail and vivid characterization. It is probable that high school history would be greatly strengthened if converted largely into biography.

75. Great Men Representative of Great Ideas and Movements. One special reason may be assigned for this preëminent place that choice biography should have throughout the whole course of education. Great men are typical embodiments of great ideas and important movements, as Bacon, of inductive reasoning; Darwin, of the evolutionary doctrine; Webster, as the type of statesman who was profoundly impressed with the importance of our federal union; Scott, as a type of the great novelist.

Huxley was a fine representative of the idea of modern scientific study. Emerson's essays on *Representative Men* are a remarkable demonstration of this typical, universal quality incarnated in individuals. Plato was the type of the idealist in philosophy, Galileo of scientific discovery along modern lines. Columbus is one preëminent type of the modern geographic explorer. In such men the great ideas that move the world come to their most powerful expression and take on a meaning that common men can understand.

The emphasis here placed upon biography is designed to give to superior biographical stories a prominence such as has been given to type studies and projects in several studies. A select biography is an important center upon which to group and combine extensive knowledge material. Being also typical, it is, in fact, a superior form of the type study. Such central topics are coming into full recognition as strategic points in education and strongholds of knowledge, and it is far more important to take possession of a few such strongholds than to scatter superficially over a broad field of more or less miscellaneous facts; better far than to memorize a long list of so-called important facts. Our schools have been too much addicted to this process and too little disposed to group about fundamental ideas and strong personalities the illuminating knowledge that really explains the important problems and forces of our time.

Our teaching needs to be centralized upon essentials; these essentials are not mere lists of important facts, but large teaching units embodying controlling ideas. There can be no better manifestation of an important idea than as exhibited by a strong biographical portraiture. A man of action in a world of action exhibited as a representative of a constructive idea working upon society is one of the best centers of organization that can be discovered.

AMERICANIZATION

76. Biography. One of the chief functions of the common schools is to cultivate in the children the best spirit and the best influences of American life. Fortunately, the whole school program and the curriculum of studies contribute in fruitful abundance the educative influences best calculated to realize this purpose.

It is very plain that the inspiring biographies of noble Americans, which we have just discussed at length, will contribute one of the chief elements in this Americanization program. It has been observed that the stories of Lincoln and Washington and of other American heroes and leaders are very popular in classes of foreigners studying English in our night schools. These are classes for adults. Such stories selected from our earlier and later history are remarkable illustrations of the spirit and opportunity of American life. While these foreigners are learning to read and talk English they are also absorbing through personal biography the ideas and aspirations of common interest to all Americans.

One of our great historians has emphatically affirmed the statement that the frontier is the spot above all other places where the genuine spirit of American life can be met in its most distinctive form. The biographical stories of exploration and of frontier life are also the strongest and most invigorating of our American history, including such characters as Washington in his early years, Jackson, George Rogers Clark, Kenton, Boone, Houston, Davie Crockett and many others.

Our school children are of many races, and they enter the schools speaking many languages, but in passing through the primary and intermediate grades they absorb the hero stories of American life; because of these and other life influences before they finish the grades they are so completely Americanized that an original Puritan could hardly discriminate between them and his own children.

The school in its whole organization and environment, as well as in its curriculum, contributes powerfully to this same end. A working knowledge of the English language is of course indispensable for any one who is to share in American ideas and civilization. So we say that any one who can read and write simple English is at least *literate*, and has the basis upon which to acquire the culture and experience of our times.

77. The Best American Writers. But the spirit and temper of America can be acquired only by absorbing its better ideas and standards, as demonstrated in history and literature and the very life of the people. Literature supplies a very important contribution, as expressed in the works of Whittier, Bryant, Emerson, Lowell, Longfellow, Webster, Everett, Lincoln and other distinctly American authors. Such writers have set up the ideals of American life, the best expression of our hopes and aspirations, the progressive, forward looking aims which foretell a better and greater future. America is a national life in the making, and its best spirit is expressed by the word *opportunity*.

The schools are trying to make the best use of literature to this end. The lives of authors, such as Irving and Hawthorne and Whitman, with the message of their works, are a very significant part of our best American hopefulness and idealism. These are caught up into the lives of boys and girls, and will thus continue to perpetuate from generation to generation the best qualities of our American life.

The teachings of geography and science are beginning to contribute powerfully to this same end, because the greatness of these topics expresses the largeness, the amplitude of American life in its material aspects in harmony with the great spiritual forces at work.

78. Material Resources. The large projects that have been worked out and that are now in process of development in industrial and economic life—our vast wheat belts and cornfields; our railroads, rivers and canals; our mining and forestry; our fisheries; our huge commercial exchanges; our colossal manufacturing plants, and our civic institutions—are of such magnitude and importance as to awaken the respect and admiration of boys and girls. They should be discussed on such a broad scale and with such a comprehensive clearness as to make all to realize the grandeur of our country in its material resources and the still greater importance of its government and institutions.

The largely-expanded type studies and projects we have been discussing are an effort to satisfy this new demand for great descriptive object-lessons appropriate to our enlarging national life. Little, trifling topics, formal memory drills on the mere names of things, will not satisfy this American spirit, this larger comprehension of powerful and active agencies at work in American society. The schools must rise to this new occasion, must seize upon what is aggressively great and typical and elaborate—these larger concepts on a background of clearly depicted life activities. We must marshal these forces into large panoramic views.

79. Religion. American life would be incomplete without the powerful patriotic and earnest religious element which has been so potential to the present. Many of our noblest institutions have sprung from deep religious motives and convictions. The school cannot avoid appropriating such influences in its instructional work—influences which are intermingled with all our history, especially with our literature and our social institutions. It is not a question as to whether we shall teach the Bible in the school, but whether the school shall be allowed and encouraged to absorb into its teaching the best and most powerful influences expressed in American literature and biography, and present as ideals actually efficient in the active life of the people.

Besides all this, we have in full action the life of the playground and the democratic social life and intercourse of all sorts of children.

TESTS AND MEASUREMENTS

80. Accurately Determined Standards Needed. One of the principal aims of the movement known as "Tests and Measurements" is to bring more scientific accuracy into our teaching and instructional work.

We have long used some kind of a marking system and examinations as a means of determining character and equipment for future work. But the defects of our marking systems have been so notorious, and the variation among teachers even in marking the same papers has been so great and even contradictory, that something decidedly better has been demanded. Our written and oral examinations, even when carefully regulated, have been a very imperfect and often unsatisfactory means of determining the scholarship and ability of students.

What was needed was accurately-determined standards of general validity which could be applied to all students, without too much machinery. It has been a movement to establish reliable scientific standards which can be steadily applied to different kinds of school work and its results.

The results already achieved have proved themselves to be of vast importance to the schools that have made use of them, and no matter how important the results already attained the future seems to hold far greater things in store. All good teachers should understand and approve such a movement as this, because it puts its seal upon real success and efficiency in school work; it will expose shams at every turn, and thus establish the work of teaching upon a much sounder basis.

81. Writing and Spelling Scales. Standard scales were first worked out and tested in writing and spelling. On account of the simple, formal quality of these studies a measuring scale is more easily established than in the thought studies like literature and science. The Ayers' spelling scale of 1,000 most commonly used words is the result of "1,400,000 spellings by 70,000 children in eighty-four cities." It rests on a broad foundation of real experience with school children. By centering the efforts of children upon this limited list of words in universal use, a surprising economy of time in spelling is secured. The Thorndyke and Ayers writing scales have been developed with great care, and they form the basis for testing the ability and progress of the children in writing.

By following the directions published for the use of these scales, the teacher can soon test the success or failure of her own children as compared with a reasonable standard based upon the work of a large number of children of the same grade. In addition to finding out how one's success in teaching compares with the standards of other teachers, many other advantages come from applying these tests.

First, it provides for a better grading of the children on the basis of knowledge and ability. In comparing and grouping the scores made by the members of a class, we note how many are above an average requirement and how many fall below. At the two extremes are, first, those who probably are not able to do the grade work at all, and in contrast with these a superior group who might well be considered as candidates for promotion to a higher grade. At any rate, the results of such a test bring to the front this question of the proper grading of the class for better work in the future. The results of such carefully-applied tests in some cases have been to advance a considerable percentage of children to a higher grade, where they could have the kind of work suited to their abilities. As a means of regarding children and of getting them into their proper places, such tests have been of value to whole systems of schools in cities or towns. Such regrading economizes the time of children and enables the teacher to plan her work better for classes whose abilities are more equal.

Secondly, children who have reached an acceptable standard for writing or spelling, especially those well above this standard scale, can be excused from this kind of work and may devote their attention to other studies where progress is needed. This would save the abler children from a large amount of useless drudgery and waste of time.

Thirdly, as fast as the formal studies are standardized and suitable tests applied, the waste of time in dull repetition and in useless exercises can be abolished. In spelling exercises, for example, a large amount of time has usually been wasted in learning the spelling of unusual words which the average person seldom, if ever, uses in writing. The spelling lists made out as a basis for the standard scales have been selected with infinite care as the result of extensive tabulation of words commonly used by children in writing, and by business men in ordinary correspondence. They are the words that practically everybody uses in writing letters, etc., and their proper spelling is necessary. The spelling studies of the schools should be centered upon these few words and not distributed widely over a multitude of other words, many of which will never be needed. The "hundred demons," selected by Dr. Franklin Jones, are especially worthy of careful study, as he has demonstrated that they are the words commonly misspelled. A full mastery of this list of one hundred words would probably prevent half the mistakes now commonly made in spelling.

Fourthly, one of the chief advantages of the writing and spelling scales is that the child can find and correct his own mistakes and can set up his own goals toward which he can work. Or, the children can correct one another's work, assisting the teacher. Such use of the standard scales is not for the purpose of testing classes to determine their relative progress as compared with other schools, but as a part of regular school exercises. Whenever possible, children should become interested in their own progress and should see plainly the aims to be achieved. In this way they can learn to compare themselves with an objective standard that has been fixed, not by a careless or arbitrary judgment of one person, but by a comparison and averaging of thousands of similar cases.

82. Curtis Tests. Arithmetic is also a subject upon which much time has been spent in developing standard scales upon which to measure the efficiency of actual teaching in the different grades.

The Curtis tests are those which have been most widely used. They are designed to measure the success of school children in addition, subtraction, multiplication and division of simple numbers. Careful directions are given for the use of these tests and for scoring the results, also for comparing the results with standard scores which were determined by tabulating the performances of thousands of children throughout the country.

Several other important scales have been worked out, as the Woody Arithmetic Scales and the Stone Reasoning Tests.

By a proper use of these tests the teacher can determine whether the median score of her class is above or below the standard score and the individual status of each child in the class with reference to a satisfactory score. It can be shown just where the weakness lies in each case and it suggests that the teacher should devise a remedy. Such results are of great value to the teacher.

83. Reading Tests. A variety of reading tests have been worked out to measure the efficiency of children in silent reading. Much stress has been laid upon silent reading, because that kind of reading counts for most in later life.

Monroe's Standardized Reading Tests have been employed to determine (1) speed in reading (the number of words read per minute) and (2) comprehension, or the ability to interpret meanings.

After using these tests and making out the scores and tabulating them so as to determine a median score, the teacher then compares these results with a standard score and is able to judge what her own success is as compared with a reliable standard. She may find it advisable to reclassify the children on the basis of these results, or she may use other tests and such devices as may serve to help the children to better achievement.

Other reading tests have been used, as Haggerty's Visual Vocabulary Test, Gray's Oral Reading Tests and Thorndyke's Scale, Alpha, 2.

These reading tests have been tried out in a variety of ways, and it is now possible, by a careful use of these standards and by following the directions, to determine the reading ability of children. Many teachers, after using these tests as a means of judging the standing of their children and the particular faults in their reading, have been able to introduce changes in their instruction which have greatly improved the quality of the reading exercises. Oral reading has also been tried out by these tests. One important result is the increased emphasis now placed upon silent, or thought, reading. No subject is of greater importance among school studies than reading, because the ability to comprehend reading matter from the printed page is fundamental to success in all studies.

Careful tests which have proved successful on a large scale have been subjected to the use of tests. Thus far they have been mainly employed to test information. But history and geography and other thought-subjects are far more difficult to test on a standard scale than the formal studies, because the best results in thinking and judging, in interpreting meanings and in appreciation are too variable and intangible to be formally tested. Such tests have a tendency to lower the standard to purely informational bases, in which memory is the chief thing tested. And yet the effort to formulate questions and establish a standard scale for these more fugitive thought-studies is having an excellent effect. It is leading to more serious and thoughtful effort to formulate better questions, which will test thought, reasoning and judgment. In thought-studies more attention is being paid to important topics as centers of organization and to the formulation of questions that strike such centers of thought. One of the chief needs in history and geography is to determine large standard units and types which will serve as measuring units for estimating fundamental values.

84. General Results. One of the chief results thus far attained by the tests and measures movement is their use extensively in making surveys of city school systems and even of school systems on a larger scale. Among these may be mentioned the Cleveland Survey, the Butte Survey, the Portland (Oregon) Survey, the Richmond (Va.) Survey, the San Francisco Survey; there are many others whose results have been published, while still others are in progress. Through these extensive surveys this movement has risen to national importance, and definite comparisons have been made between cities and groups of cities, showing their relative standing as based upon experience with these standard scales. Large cities have established departments of investigation and research with a view to improvement in the schools. Many of the universities, especially departments of education at universities, have made important investigations bearing on important phases of the measurement problem and its uses.

An important chapter in this entire investigation is known under the title "The Measurement of General Intelligence." It has been customary to grade children in the public school according to their age, the date of birth, etc., and children are commonly admitted to the first grade at six, to the second grade a year later, etc. The use of intelligence tests has brought out the fact more conspicuously that the *chronological* age of a child and his *mental* age are frequently not the same, and that lumping children into classes according to (chronological) age is a poor and crude system of grading and brings into the same class children of widely different ability and attainment. The intelligence tests are designed to reclassify the children on the basis of mental age, that is, of real ability. If this can be accomplished it will be an untold relief to thousands of teachers who will have in the same class children of similar ability. It will be of still greater service to more thousands of children who will be placed where they can meet reasonable demands and can make progress according to capacity.

On account of the importance of these intelligence tests and their use in grading children according to mental age, it has been proposed that all teachers in training at normal schools be required to pursue a course in the general intelligence tests.

Terman's book on *The Measurement of Intelligence* is the standard introduction for this subject.

Wilson and Hoke say, "The ultimate purpose of a test, so far as the individual teacher is concerned, is to enable her to see the needs of her pupils and to search out the appropriate remedies. The discovery of the remedy in any subject takes her into the question of methods of teaching, but this is a desirable result. To use a test for measurement only, without carrying the work forward to a point of use and application in better teaching, is to close the eyes to the significance of a situation after it has been revealed. The teacher, after giving a test, is in the position of a specialist who has diagnosed a bodily ailment. The diagnosis means nothing unless the appropriate remedy is applied. The recognition of this fact leads a teacher or a group of teachers again and again into the study of methods of teaching with reference to the subject tested."

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RURAL LIFE
AND EDUCATION

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IN TEN CHAPTERS

CHAPTER ONE

THE RURAL TEACHERS' GREAT OPPORTUNITY

1. Ineffectiveness of Rural Teaching. It is undeniably true that in the past both our teaching and our educational systems in rural communities have been largely city school systems moved out to the open country — systems which have but poorly answered the needs of an agricultural population, and which, indeed, have often weaned the rural-minded people away from the land, and have drawn them instead into the activities of the organized industrial cities.

By this we do not mean that agricultural people can get along with less education than can people living in towns and cities, nor should their education differ much from that of the latter, so far as the so-called fundamental and cultural elements are concerned. The chief difference lies in the practical application of school studies to environment and life occupation more than to anything else.

It is well to be clear on this point, that the new type of education should, first of all, be more broadly cultural than it has been in the past. Without question, the American farmer is suffering as much to-day from the lack of being broadly read and from lack of knowledge of the best in literature, history and social science as he is from the lack of technical and practical preparation for his life work.

It is quite clear that the education of the great reconstruction period following the period of settlement and transition, as well as the reconstruction period following the great World War, must be both broadly cultural and broadly practical. While the new education should prepare for wholesome, attractive and remunerative life on the land, it should in no wise be so organized as to exclude our best rural blood from entrance into other occupations and professions.

Unfortunately, the rural teachers, on whom rests the greatest responsibility for giving farm communities their leadership and correct outlook on life, have not in the past been fully aware of the responsibility and the opportunities in this great, new field. Just what has been wrong will be set forth in the following pages. No rural teacher can hope to do the most for the rural school or the rural community who does not approximate in a reasonable measure the qualifications outlined towards the end of this chapter.

2. The Rural Teachers Have not Kept Pace with Our Changing Life Conditions. Every teacher should have some appreciation of the rapid changes that the nation has passed through since it was founded, in order to get a clear conception of the problems of rural life as they now present themselves. As a nation we have long since passed from the pioneer stage of national life, and the days when every farm place produced all that it needed to sustain life, independent of the city.

The nation has for some time been in the midst of a period of exploitation of the soil and what grows on it and lies under it; but we are now getting ready to enter upon an era of husbandman farming, when all people must understand the significance of "honoring the soil." This calls for a new, intelligent leadership for the open country; and to bring this to pass, we must somehow get a more effective kind of rural schools.

In pioneer days school tasks were limited largely to teaching the three R's. The average home was still a mighty teacher, instructing the children in the common handicrafts which have recently been falling more and more to the lot of the school. In this way it appears that the teacher's field of activity is becoming greatly enlarged with the opening of the new age of husbandman farming.

The first rural teacher in America was unquestionably town reared and town trained, had city ways and sympathies, and brought with him to the country a city course of study. But in the early days this was of little consequence; for then even city life, so called, was provincial and really little more than an overgrown rural life. But times have changed. Our towns have become mighty centers of commerce and manufacture. The needs of city life have found expression in courses of study preparing children for the varied activities there.

Meanwhile, the needs of rural life have been slower to find expression. In many sections of our country the demands of modern agriculture have not yet been sufficiently strong to bring into being schools adequate to modern needs; while, inversely, in other sections the pioneer-day schools still linger on, retarding the growth of new leadership and correct outlook on agricultural life.

3. Failure of Young People to Prepare Specifically for Modern Rural Teaching. Teacher-training institutions in America, and our general educational leaders as well, have been slow to recognize the need of specific training for rural schools. There are still good schoolmen among us who insist that any one who has taken a good general academic and professional course in college or normal school should be able to teach satisfactorily in rural districts. This, of course, is foolishness. Fortunately for the future of American agricultural life, these beliefs no longer bear the weight they used to have, and men argue with good reason that if kindergarten teachers and teachers of English and history must have special preparation for their work, then why not also the rural teachers who come face to face with the increasingly difficult problem of re-shaping rural community life.

The average rural teacher in the United States to-day has little specific preparation for his work. A great many teachers go into the schools with a surprisingly small store of academic and professional knowledge of any kind. A country-wide survey of the efficiency and preparation of rural teachers, recently completed by the United States Bureau of Education, has disclosed that almost 4 per cent of all the teachers now engaged in rural school work have had less than eight years of elementary school preparation; that 32.3 per cent have had no professional preparation whatever, and that only one-half of one per cent report attendance at institutions of learning making a specialty of preparing rural teachers.

4. Great Opportunities in Store for Real Rural Teachers. It would probably be wrong to say that the teachers themselves are to blame for this condition of things. It should rather be laid at the door of our prevailing system of school organization, and this system again is what it is because of the rapid transition in our national life from pioneering, through land exploitation, to scientific farming. In other words, school conditions, as they have prevailed in the past, were due to economic conditions largely beyond human control. But now the nation is entering upon a new era, throughout which science and professional preparation must set up new life standards for the agricultural population. In this great work there is no place for makeshift, amateur teachers or teaching.

Never before in our history was there such opportunity for well-equipped young men and women in the field of rural leadership. An awakening is going on in the institutions of rural life as at no time in the past. Urgent demands, at good salaries, come for teachers from the recently organized consolidated and one-teacher farm community schools, and from higher educational institutions which are themselves striving to prepare teachers, local agricultural experts and other country life leaders.

5. The New Rural Teacher—A Permanent, Professional Teacher. It is, of course, true that many of our best and most painstaking teachers are devoting their lives to teaching in the open country, accomplishing great good there. But, unfortunately, these teachers are a very small body compared to the surprisingly large army who are mere makeshift amateurs, with little intention of becoming permanent teachers.

The type of teacher who spends five days out of the week in the school community and the week-end in town, is not the right kind of teacher to master our pressing rural problems. These call for broad understanding of rural needs; and almost sublime faith in self and the importance of the new tasks; also a willingness to forego some of the pleasures and greater conveniences of the larger centers of population — entirely aside from a good academic and professional preparation for school work.

It is not to the credit of our country people to have to admit that the average teacher does suffer considerable hardship in the pursuit of his work in the open country. This has reference particularly to poor construction of the school plant, with its unsatisfactorv equipment, and too inconvenient and often intolerable housing and uncongenial social environment. But all of these things must be faced and corrected. It is in such matters as these that the real teachers show their true metal. Teachers who flinch before the many obstacles encountered while the reorganization is under way are not worthy of leadership. They should shun teaching, which at best is difficult and a real man's or a strong woman's task.

6. How to Prepare for the New Leadership. Just what, then, should the ambitious teacher or student-in-training do to fit himself for the new rural leadership? Just what must the academic and professional preparation be for this work? Briefly answered: The general academic preparation of the new kind of teacher must, first of all, be much deeper and more comprehensive than is the academic foundation of the average teacher now at work in the field. Our agricultural population is suffering as much from the want of a vision-giving breadth of culture as from the want of technical preparation for their life work. They need, in fact, a great measure of both to make them real thinkers, able to organize their agricultural life without outside let or hindrance. Only teachers who are themselves students and thinkers of reasonable maturity can hope to counteract the effects of the comparative isolation from which the open country suffers, and be able to assist the people there to think much and read broadly so that ultimately a new and ennobling altruism shall become part of our rural community life.

A broad measure of academic culture should, therefore, be considered a first essential to all rural teaching success. To this must be added a reasonable knowledge of child study, psychology, philosophy and history of education, together with school management and methods of study.

But entirely aside from these, the rural teacher, to succeed well, must have a good measure of specialized preparation for his difficult tasks. This preparation should embrace (1) an intimate knowledge of the problems and needs of rural life, in order that he may take his place in community leadership; (2) a thorough understanding of modern school organization and administration, so that he may become an intelligent leader in the work to convert the prevailing old-time school into an institution suited to modern agricultural needs; and (3) a mastery of the new subject matter in the course of study which farm people must know in order to get the most out of life.

7. Teachers Must Understand the Fundamental Needs of Rural Life. To have been born and reared in the country is no guarantee in itself that a person understands the needs of rural life, although it is probably easier for such a person to get the right outlook on life in the open country than would be the case with the average city-bred person. Experience has proved that whether the teacher is from rural district or town, he knows little in a concrete way about the fundamental economic and social problems that underlie modern agricultural life which are of vital importance in school conduct. It may seem harsh to say, but it is nevertheless true, that a teacher who does not, in the study of these rural problems, find inspiration enough for a redoubled effort in his work and vision clear enough to see and do the tasks of the new rural community school, would better retire from teaching and seek a less trying occupation.

8. Teachers Must Know How to Organize Rural Community Schools. The old-time teacher limited his tasks to the four walls of the school. He taught a few traditional subjects and dreamed of no innovations. The schoolhouse was constructed without regard for sanitary safeguards, as no one worried about such things in those days. The school was a place for book-learning, and it had no concern with general community welfare. Now things are changed. The modern rural school is a very different kind of institution. Its tasks are no longer limited by the four walls of the school. The effective school nowadays goes so far as to project its activities into the homes of the community, preparing the farm youth for active, contented life on the farm.

This calls for a modern school plant, for enlarged school grounds, and for many other things unknown a few years ago. There must be reorganization from the ground up. Not alone is the organization of the school greatly changed, but its administration has become complex as the problems to be considered have multiplied. All in all, it takes a teacher with a specialized knowledge of these phases of school life to master the new situation.

9. The Teacher Must Master the New Course of Study. The new school curriculum is based on what the farmer and his wife ought to know. There is, first of all, the human element to be considered. This includes health and happiness. Then comes the preparation of the members of the family for the privileges and responsibilities of citizenship, and finally, their right to a preparation that will help them make a good living from the soil. Any course of study which includes less than this will not meet the new demands. A teacher who is not reasonably well prepared to teach some part of this curriculum cannot be considered well fitted for the new schools.

QUESTION STUDY

1. Is it fair to say that the new kind of rural teacher must take the responsibility for giving the rural community its needed leadership and correct outlook on agricultural life? Explain.
2. Show wherein the responsibilities of the rural teacher have been increased greatly since the passing of the three R's school of pioneer days.
3. Prove that rural teachers have, in the past, not been prepared for work in real farm community schools.
4. What is your interpretation of a makeshift teacher? Show how such a teacher usually gets all the salary he earns.
5. Do you believe that in the long run the teacher is quite sure to receive all that he is worth to a school community? Explain in full.
6. Do you spend your week-ends in the school community? If not, how do you justify your action?

7. Enumerate the essentials of a permanent, professional teacher.

8. Just why must the new kind of teacher have a thorough understanding of present-day rural life problems?

9. To what extent should every rural teacher have a knowledge of the problems of modern school organization and administration?

10. Why is it necessary to revitalize the rural school course of study?

CHAPTER TWO

THE RURAL TEACHER IN COMMUNITY ORGANIZATION

1. General Statement. The rural teacher should understand why our rural conditions are just what they are, and why the small rural school has become the retarded institution that it is. He should also know something about the various factors and elements in the problem of rural life as it confronts us to-day. Only by taking an occasional inventory of his assets and liabilities can an individual know his actual financial standing. Similarly, it was not until rural sociologists began "taking stock" of rural life assets and liabilities that the nation at large learned to pay any heed to its own unsettled rural condition.

2. The Epoch-Making Report of 1908. The first great investigation into American rural life was made by President Roosevelt's Commission on Country Life in 1908. The purpose of the investigation was to arrive at an exact understanding of our rural life and public opinion in regard to this life. The field of investigation followed by the commission was very comprehensive and resulted in many interesting disclosures. It appeared, first of all, that nobody realized better than the farm folk themselves the shortcomings and needs of farm life. Out of the many conferences held and letters exchanged the following facts soon became clear: (1) Farmers must have and, indeed, they demand modern educational facilities; (2) effective coöperation in economic and social relations demanded; (3) better means of communication imperative, and (4) better health conditions needed. The report of the commission was epoch-making, because it was the first concerted effort to show in a concrete way the multitude of rural life shortcomings that thinking people had long felt to exist. It laid no claims to being final or even to being very scientific in its investigation. But it did open the way and set the people to thinking and doing.

3. Important Reforms Must Come from Within. Since the time when the great commission made its report, many other surveys, state and local, have been made. Some of these have led to improvements in education, religious life, recreational life and community health. There is a probable danger, however, that this important means of taking stock of country life may be overdone, and so fall into ill repute. Almost every Tom, Dick or Harry who is eager to establish a reputation is ready to "survey" his home community nowadays. Teachers must realize that in unskilled hands the survey is a dangerous tool. No teacher should attempt this important work without previous expert instruction, or, at least, careful study.

The one important thing to keep in mind is that, when all is said and done, the reorganization in rural communities must come from within — from the agricultural population itself, guided by educational leadership through the new schools and other rural institutions. Meanwhile, rural teachers should understand what the rural problem is and what it is not.

4. The Great Outstanding Fact in American Life. The one outstanding fact in American life is that the industrial centers are outgrowing the open country and rural villages. It has accordingly been reasoned by the unthinking that the first essential element in reorganization must be to get more people onto the land. It is true that the nation is increasing at the rate of about two and one-half million people annually, while production from the soil is practically at a standstill. The inference seems clear enough; and yet, the problem is *not essentially* to draw a larger population to rural districts.

It is similarly true that the country has suffered through the shift in population by moving to the industrial places or to newer agricultural regions. But the remedy is not to be sought in the so-called "back-to-the-land" movement. It is time to realize that this agitation is a city impulse, which, if realized, might help in a measure to solve the difficult problems of the city, without aiding the open country; or, in many instances, making the difficulties of the country still more complicated by dumping upon our reserve lands an overflow population of impractical city people. During the period of westward expansion many people of the "city-minded" type came into possession of land. The transition through which rural communities are now passing is really a sifting process to get rid of these people. Of course, so far as there are "rural-minded" people in the towns and cities, country people welcome them to the land; otherwise they should remain where they are.

5. The Real Problem. The real problem is to establish on the land a permanent agricultural population made up of the rural-minded people now there, and their natural increase from generation to generation. The problem resolves itself into a matter of outlook on life. Lasting improvement cannot come until farmers shall in some way attain a new and broader outlook on the true significance of farm life. This must carry with it the feeling that agriculture is the most important and honorable vocation that a man can follow. With this feeling will come a newborn dignity and confidence that will eventually make our agriculturists leaders both in state and in national affairs.

6. What Teachers and Other Rural Leaders Must Do. It is evident that educators and other rural leaders have at least the following matters to settle in a satisfactory way before there can be a stable agricultural population: (1) Farming must become more remunerative than it is; (2) farm life must be made more wholesome and more socially attractive than it is.

7. The Underlying Principles of the Rural Life Problem. Teachers should understand the underlying principles that explain present rural-life deficiencies in the United States. They should also know that to attempt improvement in one phase of rural life while ignoring other phases is certain to end in failure. The teacher, for example, cannot successfully work out the problem of school improvement if he is deaf and blind to the other social and economic questions of the community; no more can the rural pastor solve the problem of religious life in the country, if he holds aloof from educational and other community affairs. Rural leaders must understand the full significance of the important factors enumerated and briefly analyzed in the following paragraphs. Without this knowledge their work in behalf of community betterment will be seriously curtailed.

8. Isolation of Rural Life the Fundamental Difficulty. The fundamental difficulty of a modern city is to overcome the evils caused by congestion of great masses of humanity in restricted city quarters; the problem of the open country is to counteract the influence of the comparative isolation under which most farm people are obliged to live and struggle. The effects of isolation are both psychological and sociological. They leave their mark on the person as an individual as well as in his relationship with groups of individuals.

Without question this living unto one's self has made the American farmer strongly individualistic, independent and self-reliant. But these traits are more than counter-balanced by the serious social stagnation from which he has suffered. The power of suggestion that belongs to the members of larger social groups saves the individual from becoming narrow, selfish and suspicious of his neighbors. Unfortunately, such is not the case with our rural life. Farmers do not work together the way town people do. They are highly suspicious of other classes — and with some reason, as they have long been considered the legitimate prey of the better-organized classes. They fear the leadership of others, and are reluctant to form organizations, either economic or social, or to coöperate for community betterment.

9. The Stamp of Isolation on the Rural Village. This isolation has placed its stamp upon the rural village almost as much as on the open country. While not isolated in just the sense that the farm is, the power of suggestion in the few families gathered in the small village is generally insufficient to keep alive a spirit of genuine coöperation. As a result, the rural village frequently partakes of the worst elements of life in the open country without getting the benefit of its uplifting influences. Because of indifferent policing and lack of health organization small rural villages are considered by many sociologists as the least desirable places in which to rear a family. In our efforts for improvement it is, therefore, essential to include in the program this kind of rural community.

10. Isolation a Serious Hindrance to Rural Organization. A casual study discloses that successful organization is usually limited to well-peopled communities or to communities where farmers of foreign origin have brought old country systems of organization with them. Again, organization of an economic nature has occasionally come about, in spite of all hindering influences, where the necessity was great enough. The Farmers' Union, for example, was organized by Southern cotton growers to protect their markets and keep up the prices. The Western fruit growers and irrigation farmers, the dairymen of the Middle West, and many others have their own organizations for protection against outside predatory interests.

11. Farm Organizations of Many Kinds Imperative. First, there should be coöperative organization of an economic nature, teaching agriculturists to produce much from the land; to manufacture the raw materials into the finished product; and to place these products on the world markets to better advantage. In this way only can farmers expect to regain control of industries that long ago slipped out of their hands, and so retain for themselves a surplus of wealth beyond the mere necessities of life. To this end grain-, fruit- and seed-growers' associations, stock-breeding and cow-testing societies, mutual insurance societies, buying and selling organizations, credit associations, road-improvement clubs, etc., should be organized in rural communities as soon as conditions become right.

12. Organizations of Social Community Interest. The social interest of the community should be organized in a similar way. They should cover all the educational, recreational, ethical and esthetical activities. They should include public social clubs, festival days, literary clubs, reading clubs, public health societies, athletic organizations, parent-teacher associations, boys' and girls' clubs, boy scouts and camp fire girls, rural improvement associations, etc.

The ultimate hope is for school education to devise the ways and means to draw farm folk together by new community ties in spite of the drawbacks of natural environment. All the forces now available, including teachers, preachers, Y. M. C. A.

secretaries, county agricultural agents, heads of granges, farmers' unions and others should plan an organization for the home community. The work should be deliberate and thoroughly done. Towns and cities have their commercial clubs, booster clubs and improvement associations — all giving expression to organized activity. The country should have similar organizations.

13. Steps in Community Organization. Excellent plans for such a community organization have recently been made by Dr. Thomas Nixon Carver. The plan provides for a central committee and ten subcommittees, all with definite tasks to perform. The organization, indeed, is much like the city commercial club or chamber of commerce. Dr. Carver organizes his community around business and social needs in the following way:

14. Needs of Rural Communities Which Require Organization. The needs of farming communities may thus be summarized:

I. Business Needs.
    1. Better farm production.
    2. Better marketing facilities.
    3. Better means of securing farm supplies.
    4. Better credit facilities.
    5. Better means of communication:
        A. Roads.
        B. Telephones.
II. Social Needs.
    1. Better educational facilities.
    2. Better sanitation.
    3. Better opportunities for recreation.
    4. Beautification of the countryside.
    5. Better home economics.

QUESTION STUDY

1. Why should every rural life leader be conversant with the Report of the Country Life Commission?

2. What do you mean by the rural life movement? How do you distinguish it from the "back-to-the-land" movement?

3. Do you see any relation between the presert high cost of living and the fact that cities are at the present outgrowing rural communities?

4. Explain clearly wherein the rural problem is not essentially a question of larger population but of the right kind of population.

5. What do you think is necessary before we can expect a permanent rural population?

6. Do you think it is hard work or the monotony, coupled with work, that drives people from the farm?

7. Show that "isolation" is the real fundamental factor in rural life.

8. Do you think it is possible for school education to influence and improve our rural sections in spite of the drawbacks of natural environment?

9. Have you studied carefully Dr. Carver's plan of community organizations? If so, how many of these can you as a teacher plan for?

CHAPTER THREE

FUNDAMENTAL RURAL LIFE AGENCIES: THE RURAL HOME AND CHURCH

1. What They Are. Every rural teacher should understand clearly that the three fundamental institutions of rural life — and of any life, for that matter — are the home, the church and the school. The redirection of the rural community must come about through a proper relationship and successful coöperation of these three institutions, and their supplementary allies. The latter include the Young Men's and Young Women's Christian Associations, the Grange, the Farmers' Union, the Rural Press, the Farmers' Institute, the Farm Bureau, Boy Scouts and Camp Fire Girls and other similar organizations. These latter, however, are not fundamental agencies, but supplementary only, and must be studied by the teacher as such.

2. The Farm Home. The farm home is the heart of every rural community. The greatness of the latter is measured by the sum of its efficient homes. The church and the school as institutions came into existence to minister to the needs of the family group at a time when its organization had become too complex for the immediate members of the group to look after all the spiritual and educational phases of family life. In their relations the three institutions react one on another. The attitude of the home determines the activities of the church and the school. The church should inspire the family group to moral life and noble thoughts. The school should supplement the teachings of the home and help it to develop noble manhood and womanhood, and especially to furnish such preparation for life as home environment cannot conveniently provide. Every rural teacher must understand in an intimate way the real significance of the farm homes which go to make up the community in which his work is done.

3. The Pioneer-Day Farm Home. The old-time pioneer family in the United States was practically self-sustaining. We do not mean here the kind of pioneers who went West in recent years, as they carried with them full-fledged schools and churches and the same type of homes that they had had back East. We refer to the original American pioneer family of the early day. This family group produced its raw materials from the soil and forest, and manufactured them into food and clothing and shelter. There was plenty of hard work, but somehow the tasks had a unifying influence. The sturdy boys labored side by side with their fathers to clear the forest and break the land for the crops, or they bound the grain as he wielded the scythe. The girls spun the flax and wool and helped their mother make the winter's store of candles. It was a life full of compensations.

4. But the Work Was Both Hard and Exacting. There is a certain charm to the modern reader in such a description of our forefathers at work, although no one should harbor the idea that farm work in early days was anything but hard and exacting, for conveniences of a modern kind were unknown and everything had to be made and done by hand. But the multitude of tasks had a wonderful unifying influence on the family group. There was a moral and spiritual unity springing out of the close relations of parents and children. The home tasks, in which all the children had a share, taught them to be helpful to one another, persevering and kind, and above everything else, loyal to the family circle.

On the other hand, it was not all work on the old-time farms, for there was less to do in winter-time than now. During the long evenings when chores were done the family group gathered by the fire side, the story-telling began, and the few books it possessed were brought out and re-read. There could be nothing frivolous about a group of people which depended upon the Bible, *Pilgrim's Progress* and *Robinson Crusoe* for its source of inspiration.

The early farm home, more frequently than now, had its family altar, and church attendance was made regular and enforced. Moreover, there was no lack of rustic recreation. Young and old would gather for their "play-games," husking bees and quilting parties, and in some communities for the dance. The school meant much to the family circle as a social center, with its singing school, its lyceum and its spelling bee. This is the American farm home that the average teacher of the present age knows only through its history.

5. The Farm Home of the Transition Period. The average home with which our rural teachers are likely to be acquainted is a place where work predominates. It is the home of the early strugglers on the prairie. The land had to be cleared, and there was a neighboring quarter section of land to be bought. Hard, backbreaking labor much of it was, without any of the recompense which came to the earlier group through intimate and thoughtful coöperation. For under the new dispensation the home, altogether too often, has been a place only in which to eat and work and sleep after an exhausting day's labor in the fields.

The farmer of the past few years frequently has not found much to console him in the rural church. It has lost for him much of its old-time vital force. The revival no longer appeals as it did of yore. The preacher, too, has moved to town, and so has been unable to minister to the farmer as in former years. Then the school has become retarded, and further, it is unable to be the social agency it used to be.

The sturdy sons of the farm long ago ceased to bring their brides to the paternal home. As youngsters they began to shift for themselves, eager for their share of the land, or for the romance of the city. The struggle meanwhile continued at home on the land. Hired men took the place of the departed, and the unsocial existence continued until, perhaps, the women folk — mother and daughter — declared against the ceaseless struggle from starlight to starlight, and in their despair forced the abandonment of the farm.

6. The Coming of the Modern Farm Home. But every teacher should know that now the new awakening is coming to the farm community. The era of husbandman farming is being ushered in. Subtle forces are at work to strengthen the farm home in its central place in the community. The mother of the family and her daughters are being recognized in the new system of economy as wage earners on equal terms with the men who work in the fields.

Through education the new point of view is beginning to take hold on the people. Labor-saving devices for the home and new social attractions of a wholesome nature are making it possible for these members of the family group to find leisure to commune with members of their own sex — yes, the new dispensation is making it possible for the average farm woman to sit down occasionally in the midst of her flowers without needing to worry about the cabbages, onions and pigs! This is indeed a first great result of rural uplift.

7. **Education Will Help the Farmer to Keep His Agricultural Earnings.** So long as farming continued to be looked upon as a sordid, money-making business, without any relation to the mysteries of the earth and its holiness, successful farmers will invest their money in city enterprises instead of using it in country districts to upbuild homes, strong churches, fine schools and farmers' coöperative enterprises.

In many sections of the country this period of reorganization has already been reached. Instead of moving to the nearby large town, the farmers are beginning to erect modern homes on the land, equipped with all the latest appliances in heating, lighting and water supply, delightful to work in, reducing work to a minimum. In many homes churns and washing machines are now operated by power from the barn. Many a farmer has equipped an office for himself with roll-top desk and filing case; from this as headquarters he superintends the work on the farm and extends an encouraging hand to every promising enterprise.

8. **The Right Kind of Education Will Hold the Sturdy Sons on the Land.** Now that agriculture is becoming a world business on a scientific plane, the strong men with conquest in their souls will be glad to remain on the land. They are needed there. As soon as agricultural earnings begin to be expended more fully in rural communities and the rural leisure class learns to remain on the land instead of moving to town, there

will be in the country both means to do with and brains to plan with. Then the capable young man of a rural mind will get his opportunity.

The boast of many rural community of the past has been the large number of lawyers, physicians and statesmen that have gone forth from it into the world. Little have the boasters understood that this system of economy, encouraged by a wrong kind of education, has been draining the very life-blood out of the farm community. Some rural people will always go to the city where they are needed; but these will find their way easily enough without being deliberately "pointed away" from the land; the whole question of rural life will be solved as soon as the strong sons and daughters of the family group are satisfied to remain on the land, for they must found the homes from which are to come our permanent agricultural population to perpetuate a satisfactory rural civilization.

9. The Teacher to Stimulate Rural Idealism. There can be no ideal rural civilization until we succeed in developing higher ideals in the rural groups. There must be heroes in the country as well as in the city, for where a boy's heroes are there must be his interest also. In order to idealize rural life, it should be pictured with all the attractiveness that it should possess.

Here the new education spans the gap that has been separating the home and the school. The new teaching proclaims agriculture as the principal calling of the American people and the home of the modern agriculturist as the normal American abiding place. The teacher who is charged with this work must know how to idealize rural life. He should know its heroes and sing their praises, for our rural life has its real heroes — men who have conquered nature, men who have made things grow where nothing grew before; who have improved grain and fruit and beasts; who have organized the very children to become lovers of nature and producers of its first fruits; who have proved by their deeds the best lesson of all — that the land is holy!

10. The Rural Church. The rural church is in much the same difficulties to-day that the rural school is. It, too, has suffered much from changing national life. In many communities it is decadent; in others it is being able to readjust itself to the new conditions of life and is regaining its leadership in religious and social service.

The rural church has passed through all the periods of evolution peculiar to American rural life. In pioneer times, westward of the Alleghanies, meeting houses were few, the settlements being satisfied with the occasional circuit-rider who came to exhort the people, to baptize, to marry and to bury their dead. The pioneer period was marked by its emotional revival and camp meetings, which was a natural thing for men living in the midst of danger, on the edge of forest and prairie.

In course of time the church became well established at the crossroads. As the community prospered, the church prospered and grew in numbers. Denominational rivalry began, and the crossroads soon were able to boast two, three and often more churches. This denominational rivalry was stimulating in its early stages, but led to over-churching and later to a losing struggle against the burden of debt when the rural transition began to be felt.

Still later, as the period of exploitation in our agricultural life came, the churches began losing membership as people moved West or to town. Often the old families who had supported the church of their denomination for generations moved away, and no new "pillars of the church" came to take their place. Churches that had faced a struggle to keep their work going now closed their doors, one after another. Rural districts proved over-churched; and as they weakened, the churches were less and less able to offer the service needed by the reorganizing agricultural communities.

As a result, country churches have been dying by hundreds and thousands in the different states. In other places they are lingering on, barely keeping their doors open. The rural church, like the rural school, needs revitalization. Indeed, it is already being reorganized on the basis of community service.

11. New Ideals Based on Community Service. The rural church must do more than seek the salvation of the individual soul and minister to the saints within its own congregation. The great business of the church is to get the religion of Christ into the whole community and hence out over the world.

The new ideals call for coöperation of the churches on the broadest Christian lines to lift the whole community, and to make it morally and socially wholesome. The new rural church should alone have the priestly functions and mediate between God and men; it should mediate between man and man as well and help the farmers to live useful, wholesome lives in the community, by taking an interest in their work-a-day life — in their social and recreational affairs, in their institutes and granges, and their coöperative creameries and fruit-growing associations. The American people of to-day are beyond everything else practical; to make a winning appeal to strong men the church, too, must be practical and learn again to preach, as Moses did of old, the holiness of the land.

The final test must be an ability to serve. The church's first labor is to teach the love of God in every heart, and its second, to get this love of God into everyday life to make justice and fair-dealing part of our business relations. The church will stand for clean rural politics; it will encourage sanitary life and take an active part in the new recreation and play-life needed in the open country; it will take an active part in increasing farm production and soil productivity, and coöperate with the teacher to give the community efficient school education.

12. The Rural Teacher and Pastor Shoulder to Shoulder. Every well-poised rural teacher will naturally participate in local church activities as would any other member of the community. But the teacher must take an active interest in the religious life of the community as well, because of the inseparableness of the church and school as fundamental institutions in community life. Teachers should study this question as earnestly as they would the school question, and when they come into a new community seek the coöperation of the local pastor, if there is one, and in case church interests are unorganized, work to the end of getting a resident pastor in the community.

QUESTION STUDY

1. Explain just how the home is the fundamental rural institution.

2. Show the intimate relation of home, church and school.

3. Describe the pioneer-day farm home, and contrast it with the farm home of the transition period.

4. Is the statement true that "the farmer's work is from sun to sun, but the work of his wife is never done"?

5. Has the "great awakening" come to your community yet? What are you doing to hasten the day?

6. Explain in detail the importance of keeping the agricultural earnings as well as the leisure class in rural communities.

7. Show in your own way how a new outgrowth of rural life — a new rural school idealism — will help to keep the strong young men on the land.

8. Show clearly what is the place of the church in American rural life.

9. Distinguish between church coöperation and church federation, if any is practiced in your community.

10. What is meant by saying that the Young Men's Christian Association and the Young Women's Christian Association are allies of the church and school? Explain fully.

11. Has your county an organized rural Young Men's Christian Association? If so, tell of the relationship between its leaders and its teachers.

CHAPTER FOUR

OTHER AGENCIES AND ALLIES OF THE RURAL TEACHER

The following are the most important agencies and allies, in addition to the three primary institutions discussed in preceding chapters, which should be familiar to all rural teachers because of the important part they have in rural improvement. Some of these organizations are essentially social in their aim; others are primarily business organizations; but all of them afford excellent opportunities for co-operation on the part of the teacher.

1. The Grange. The Grange, or Patrons of Husbandry, as it is officially known, is probably the most important social-educational organization of American farmers. The society was organized in Washington, D. C., in 1867, to advance the general interests of agricultural life. The purpose for which it was created was, briefly, to bring all farmers together through organization and coöperation, to the end of securing their mental, moral and social advancement. All personal, local, sectional, national prejudices and unhealthy rivalry and selfish ambition were to be suppressed. To promote their material interests, producers and consumers were to be brought into as friendly and direct relations as possible, through the elimination of all superfluous middlemen. The purposes were further to encourage a better relation between the farmers and public transportation companies; to strive to remove antagonism between capital and labor; to advance the cause of education among farmers and their children by all just powers; to refrain, as an order, from political organization or participation; to encourage members as American citizens "to do all they can in their own party to put down bribery, corruption and trickery;" and to inculcate a proper appreciation of the abilities and sphere of farm women.

This remarkable organization, while it has had its periods of success and depression, is nevertheless a potent institution to-day for rural betterment; notably is the social and educational service of the Grange of inestimable importance.

2. Teachers as Workers in the Grange. The Grange invites into its membership rural teachers, ministers and physicians. Certainly it is difficult to conceive of a better way for the teacher to reach the heart of rural community life than through the medium of the Grange. To be an active granger does not preclude the teacher from leadership in other rural organizations. Scores of community-leading teachers are grangers. Many hold the important office of "lecturer" in the local grange, which gives them opportunities to plan and direct the social educational programs of the weekly and occasional meetings. Many teachers have been able to accomplish more for their schools and for rural community life because of their intimate association with the Patrons of Husbandry.

3. Farmers' Clubs. Some people are prejudiced against secret organizations and do not care to join such orders as the Grange or the Farmers' Union; others may be disqualified, for some reason, from holding membership in them. It is essential that these people take active part in community organization of some kind. As suggested in a former chapter, the city has its business men's club, or commercial exchange. It becomes the business men's clearing-house, and in a more limited sense the social home of its membership. Similar clubs are springing up among the farmers in many sections. They have come into existence usually as a result of the good work done by national and local extension workers, including in its list county agents, rural teachers, ministers and Young Men's Christian Association workers. Clubs of this kind promote community social life through public gatherings devoted to amusement, rallying all its men, women and children for games and athletic sports. The more serious economic problems are considered in special business sessions, when questions of coöperative enterprise—of community buying and selling, of organizing cow-testing associations and stock-breeding societies and the like—come up for consideration and action. Some farmers' clubs have taken on the force of a distinct movement, as the "Hesperia

Movement" in Michigan or the "Amenia Annual Play Festival" in New York State. Many clubs limit their activities to social-educational betterment, as in the instance of the last mentioned; although some endeavor to cover the more inclusive field of economic, educational, scientific, social and promotive activities.

4. Rural Parent-Teacher Associations. Of recent years the responsibilities of the school in child-training have multiplied, since the home and church find this task more difficult of accomplishment under the pressure of modern conditions than it was in the old household-economy period. But even now, parents and teachers must coöperate in the guidance of the children. Past lack of coöperation and of mutual understanding have been detrimental to the children. To remedy this, the parent-teacher association came into being.

Parents and teachers mingle freely in their meetings and exchange views on child rearing and child training. The new information enables parents to become better home-makers for their children, and the teachers to understand better the educational needs of the individual children under their care. Home and school are drawn into a new heart-to-heart relationship, making of the parents ardent champions of school education and all school improvements; while the teacher, encouraged and cheered by the new partnership of home and school, is enabled to project the school's activities into the life of the community in a way hitherto unknown.

There should be a parent-teacher association in every rural community. Rural teachers must depend largely on their own ingenuity. They have no supervisor at their elbow to lean on. They have the choice of shutting themselves up in their own little chambers after school, or of organizing their supersensitive, often critical patrons into an association where good-fellowship, harmony and understanding of purpose shall prevail. In communities where rural teachers have organized these associations the schools usually prosper and the teachers prosper with them. Districts that formerly were too poor to repair the old school houses have erected new buildings, and means have been found to increase the teachers' salaries. Rural teachers can do no better than to begin planning such associations at the earliest convenience. As a first step it would be well to study the literature on the subject.

5. Rural Boy Scouts. The Boy Scouts of America are beginning to find representation in rural districts under the name of rural boy scouts. The organization takes advantage of the tendency among adolescent boys to form gangs. This craving for association is turned to noble uses. Through his troop the scout learns to love his fellow man and respect the rights of others. As he passes from tenderfoot rank through second class to first class scout, he learns to live the scout law—he must be trustworthy, loyal, helpful, friendly, courteous, kind, obedient, cheerful, brave, clean, reverent. Rural teachers bear testimony to the value of scout organizations in their schools. Discipline becomes simple through the tacit understanding of helpfulness between scouts and scout master. The study of nature environment, of geography and history, of agriculture and farm sanitation, takes on a new charm and interest. The scouts, wherever carefully organized, promise much for the new leadership repeatedly mentioned in these pages.

6. Rural Girl Scouts and Camp Fire Girls. The corresponding organization for girls is the Camp Fire Girls, and more recently also the Girl Scouts. Both teach those things which are broadening and vital in the girl's life. The Camp Fire girl is taught to love nature's ways and to be domestic. The whole aim may be summed up in the Camp Fire law, which is "to seek beauty, give service, pursue knowledge, be trustworthy, hold on to health, glorify work, be happy."

7. The Blue Birds. This is a sister organization of the Camp Fire Girls, for those between six and twelve years of age. Under the leadership of their guardians the smaller children are given the "true inheritance of childhood's joy and experiences" in the play, the folk dance and the fairy tale. From "nestling" in the local group, they become "fledgling," and finally "flyer," after which they may be advanced to the senior organization.

8. Farm Defenders. This is a new organization to parallel the

Boy Scouts for the younger boys, like the Blue Birds for the Camp Fire Girls. It is planned for boys under twelve years of age, who are banded to defend the farm home and countryside against its natural enemies in the animal and vegetable kingdoms, as they are the loyal protectors of its friends in birds and insects and toads.

9. Boys' and Girls' Industrial Clubs. No organization, combining school and home activities, has been of greater value in awakening community interest than have the boys' and girls' industrial clubs. They are organized primarily to teach the dignity of honest labor and to give instruction intended to master the vital phases of agricultural life. The range of club activities is almost unlimited, beginning with corn and tomato clubs and including the whole gamut of activities, as potato-growing, fruit-growing, poultry-raising, baby beef-raising, sewing, cooking, implement-making and many others.

The industrial clubs are promoted by national and state governments, by local organizations of all kinds, granges, Young Men's Christian Associations, churches and schools. The rural teacher has no greater means at his disposal to coördinate home and school activities than through just such clubs as these.

10. The Federal Government a Great Ally. The Federal government can be of great help to the rural teacher. The United States Bureau of Education maintains a well-organized rural school division, which serves about 250,000 rural schools of the nation. Teachers who are interested in receiving bulletins pertaining to the rural schools should address the Commissioner of Education, Washington, D. C.

Similarly, the United States Department of Agriculture reaches out over the nation through its well-organized Extension service. This work rubs shoulders with the rural teacher through the county agent, who is maintained in part by the state government and in part through funds of the Department of Agriculture. Every teacher should work in coöperation with the county agent. The latter can be of inestimable importance to the school and the teacher in helping to organize the agricultural work of the school and partly to help out, and probably, even to take charge of the home projects work, as corn clubs, pig clubs, poultry clubs, canning clubs, etc. One of the first things for the new teacher to do is to get acquainted with the county agent and obtain this valuable coöperation.

11. The Rural Library. It is probably true that American farm people do not read as much as or as well as they should. No better evidence of this is needed than a casual examination of the collection of books and periodicals to be found in rural homes. Unquestionably, the old system of schooling is largely responsible for this, for it furnished the more mechanical tools of reading without inculcating a real love and craving for continuing reading beyond the school. But the school must not be given all the blame. The agricultural population of a nation like the American first seeks the necessaries of life. Reading has with us been classed as belonging to the leisure class, of whom there are yet comparatively few in the rural districts.

12. What the Rural Teacher Can Do to Improve Conditions. The teacher must himself be well read and know how to transmit this ability and desire to others. His opportunity may be said to be twofold, since he has not alone the children in school to guide, but their parents at home to assist, as well. In school his function is to teach the children to read broadly the best books, teaching early that textbooks are mere compendiums to be supplemented on every hand. Liberal reading leads to independent thinking. It inspires the child to extend his search for knowledge beyond the narrow confines of the schools, so that it eventually becomes a life process, to be pursued throughout life. Beyond the school the teacher's task is to direct the attention of the adult population to the best and most useful reading. He has opportunity to assist in sifting out the trash so often read and to suggest and assist in procuring what agricultural folk need in general and practical literature. In this work the wise teacher finds an ever-ready agency in modern library organization.

13. Traveling Libraries. Traveling libraries are in operation in many states. These books are usually sent out in collections of from twenty-five to several hundred or more. They are usually placed in a store or in a schoolhouse, or possibly in a village hall or club room. The state headquarters office appoints someone in the community—very often the local teacher—to be responsible for the books, to see that they are properly loaned and returned, and that the records are properly kept. Teachers should get in touch with their own State Librarian, who will probably be in position to send out almost any kind of books that may be desired.

14. The Rural Teacher and the Rural Press. A powerful influence in rural life is the agricultural press. The increase in the circulation and excellence of farm papers and magazines since rural free delivery was instituted has been quite remarkable. As an instrument through which to reach his patrons, the teacher cannot find its equal. Originally devoted largely to crops and stock and other problems of farm production, the agricultural periodicals have lately begun to devote much space to rural organization and social life. Its great institutions, the church and school, are freely discussed, and the columns of all the leading papers are open to discussions of vital rural educational problems. Consolidation of schools, vitalization of school subjects, agricultural club work, rural improvement associations and the like are familiar to the readers of farm journals and local weeklies nowadays. Many of the latter, particularly, solicit the teachers' assistance in keeping the schools before the public. Unfortunately, too many teachers have utilized this privilege, if at all, to catalog mere local trivialities and gossip instead of using it to place the real problems and needs of the schools before their patrons. He is a judicious teacher who makes liberal use of the local and state agricultural press to keep the public informed on progress in school affairs, both as to needs and wants, successes and failures.

QUESTION STUDY

1. What is meant by coöperation of rural teachers with such agencies as are discussed in the preceding chapter?

2. Show why rural teachers should be members of the Grange and similar organizations.

3. Is there a farmer's club in your school district, or an organized farm bureau in your county? What will you do to aid in this work?

4. What do you mean by "parent-teachers' association"? Have you such an organization in your school district? If not, why not?

5. Are you a scout master or a Camp Fire guardian? Wherein does the real value of these organizations lie?

6. The boys' and girls' industrial clubs are organized as the most practical method of mastering the vital phases of agricultural life and to awaken community interest. Explain.

7. Tell what the United States Bureau of Education is doing for rural schools. Are you on the permanent mailing list for rural publications?

8. State briefly the relationship of good reading to deep thinking and hence to progress in the community.

9. Have you overhauled the school library recently? What steps have you taken to add new books?

10. What is the "rural press"? Do you keep the local papers informed on rural school progress in your district? Enumerate the rural periodicals kept on file in your school.

CHAPTER FIVE

ONE-TEACHER SCHOOLS OF FARM COMMUNITY TYPE

1. Introductory. We have in the United States all kinds of rural schools—good, bad and indifferent. In truth, they may be seen in every stage of evolution, from the little old one-room school of the pioneer period to the well-equipped rural elementary and high school. It is literally true that in many states "still sits the schoolhouse by the road, a ragged beggar sunning. Around it still the sumacs grow, and blackberry vines are running." The interpretation is of forlornness and neglect. For wild blackberry vines on the schoolground are no better than brambles and thistles and cockleburs. In some mountain sections the old "slab school" may still be encountered. On the new frontier in the Southwest and West adobe and sod shanties are still common. But the general trend is to reorganize the old-time one-room schools as modern one-teacher schools, or, where practicable, as well-graded consolidated schools.

2. Distinction between One-Teacher School and the One-Room School. Probably 212,000 schools of the single-teacher type can still be found in rural communities, the only means of education open to the large majority of rural children. It is now accepted as good national policy to reorganize all these schools to answer the needs of the new era of commercial agriculture. Many of the small schools can never be made into large centralized schools, on account of topographical reasons. In broken mountain districts, or in sections of the country cut by streams and ragged coast lines, or in sparsely settled regions, such a reorganization is seldom feasible, and should not be urged. If, on the other hand, these natural obstacles do not exist, and the only drawbacks in the way are entrenched in old traditions and failure of the people to understand modern educational needs—then it would seem the teacher's duty to champion the centralization movement rationally and energetically.

The one outstanding fact not to be lost sight of is that the one-teacher school is a pioneer institution, intended for pioneer conditions, which only in exceptional instances finds itself able to satisfy modern educational needs. So long as the small school continues in physical reality and in teaching process to be a "one-room" school, little can be expected from it. If for good reasons there can be no centralization, the school may at least be transformed into a genuine "one-teacher" school. The distinction is vital. The former is the pioneer institution; the latter is this institution made over by the exceptional teacher of the new community type.

3. The Exceptional Teacher Alone Can Make a One-Teacher School. Nowadays the rural school is charged with a multitude of responsibilities that formerly devolved on the home. For the new responsibilities the school has been obliged to depend on an immature teacher of little or no experience with rural needs and conditions. Even where the school plant is all that may be desired, if the right kind of teachers are wanting, little can be accomplished.

A short time ago there was opportunity to study an ideal one-teacher school in a state of the Middle West. The building was modern in every respect. It was correctly lighted, heated, and ventilated. The grounds contained two and one-half acres. It was gradually being planted to trees and shrubbery, after a satisfactory planting plan. The genius who had made the entire community rally to the support of the new school was none other than the teacher—a man of Herbert Quick's "brown mouse" type. But, as too often happens in rural communities, there had been a change in teachers. An immature, inexperienced person—well-meaning, no doubt—had taken the successful teacher's place. With what results? The one-teacher school was again reverting to the type of one-room schools. People of the community were once more beginning to send their children to town to school just as they had done before the new school was established.

4. Really Effective Standards for One-Teacher Schools. A truly effective one-teacher school must be standardized around such educational essentials as these: (1) a teacher with specialized preparation and willingness to make rural community teaching his permanent occupation; (2) a school plant equipped to provide an education related to rural life and its needs; (3) a course of instruction and methods of teaching in accord with the needs and nature of agricultural people.

The teacher is the chief factor in the new standardization. He should preferably have his professional training from one of the special schools for rural teachers; in any case he must be rural-minded, must love rural life, and understand its difficult problems. He must be willing to cast his lot with the country people, living in their midst the year round.

The school plant required is almost as essential as a properly prepared teacher. The grounds should contain at least five acres, and preferably more.

The school building should comply with rigid hygienic requirements in lighting, heating and ventilating; and should, in addition, provide ample room and equipment for experimental agriculture and gardening, household economics and manual training. Several of the rooms should be arranged so that they may be thrown together to form an assembly room to provide space for community rallies.

The chief departure in the new school plant is the teacher's cottage, or teacherage. Without a permanent home in the school community at his disposal, it is difficult to conceive of a permanent rural teacher. The home should be erected on the school grounds and be kept up at community expense. A portion of the school grounds should be set apart for a teacher's garden.

Such a school plant as contemplated in the standard suggested would hold out real inducements to strong, married teachers to take charge of the school, and would make it quite possible for the teacher to continue many outdoor activities of his school during the summer months.

The course of instruction is the third essential in the new standard. It should, in brief, embrace all the cultural and practical things that the farmer and his wife ought to know, in order to live healthy, wholesome lives in the community; to be ready to accept their responsibilities and opportunities as citizens of the republic; to know how to make a good living; and, finally, to understand how to use a well-earned leisure to their own ethical and esthetical advancement.

Probably considerable legislation would be necessary in some states before such standards can be reached. Among other things, special state aid could well be voted as inducement to standardize the schools. The states should also offer special inducements to teachers to remain in the same community by scaling up their salaries—adding each year an increasing sum to the amount paid by the local community. Such laws are already in operation in Wisconsin, Indiana and several other states.

5. Teachers' Cottages. The importance of providing a home for the teacher cannot be overestimated. In the first place, it would mean a long stride toward permanent teaching; because it would induce strong, well-prepared men and women to settle down to a life-work in the district, determined to give the people there the best of which they are capable. In the second place, the teacherage with its land and outbuildings would naturally draw married men teachers back into the profession—not in sufficient numbers to force the women from the field, but enough to put a leaven of masculinity into the teaching force.

We have often visited districts where it was impossible for the teacher to procure a suitable boarding place. Either people are so well-to-do that they do not care to bother with the teacher or they are so poorly housed that the teacher experiences nothing but discomfort and inconvenience. Very often the teacher has little privacy. He may likely as not have to room with some member of the family. The room is often unheated in winter, so that if there is to be any studying it has to be done in the family living room, amid annoyance and interruption. Under these circumstances, it is not surprising that many capable teachers hesitate to remain in the rural communities.

The movement to house the teachers is not new in our country. In the day of the household economy farmer it was, as a matter of fact, quite common; but more recently the practice has fallen into disuse. Now, however, a revival of good proportions is under way which bids fair to revolutionize prevailing practices.

6. Sanitary Equipment. No school can be said to be fully modern if it does not have sanitary equipment, including wholesome and convenient water supply and sanitary toilets. Nothing in the whole school plant is more essential to physical and moral health than these.

The first requirement is to have a good flowing well on the school premises, wherever physical conditions permit. No school should depend for its supply on nearby springs or a neighboring farmer's well. Springs are liable to contamination, and the wells belonging to individuals are beyond the control and inspection of the school board or medical authorities. The well may be either driven with a sufficient depth to guarantee an abundance of pure water, or be a larger dug well. Ordinarily a driven well with a force pump set in a tight-fitting cement top is the safest, because there is less chance for defilement.

The new standards demand that sanitary toilets be used in place of the old, vile, outdoor closets. Halfway measures should not be tolerated when it comes to toilet facilities for rural schools. No one problem in the school is fraught with more difficulty. And whatever of viciousness may crop out in the school can usually be traced to insanitary, indecent toilets. One cannot speak too emphatically on this matter. Teachers too often neglect their duty to the children and the community by failing to insist upon sanitary toilets. The average person seldom realizes the extent to which this neglect has been carried. Investigations by health authorities in many states have disclosed that rural school toilets are often a disgrace as well as a menace to public health.

National, state and local medical authorities have begun a consistent campaign to eliminate this form of public nuisance. The United States Public Health Service has perfected several forms of sanitary toilets now before the public through pamphlets and public demonstrations. The most effective is the so-called "L. R. S. privy." It is a septic tank disposal system, plans for which may be procured by writing to the United States Public Health Service, Washington, D. C.

Any school with a good, flowing well can install a pressure tank and flush toilets at an outlay of about $500. This will amply repay the cost and trouble in a short time. A septic sewer can be constructed at an outlay of about $150. No rural school can be considered modern if it does not have either a water flush system of toilet or a large chemical toilet which can be emptied from outside the building.

QUESTION STUDY

1. Distinguish between a one-room school and a modern one-teacher school, both as regards physical plant and educational accomplishments.
2. Wherein does the average one-room school fall short of meeting the needs of the average rural community?
3. What have you settled upon this year for home and school projects work? Does it occur to you that the best way to vitalize community life is for you to organize some home and school project, as a tomato club, a corn club, a pig club or a home garden club?
4. What do you mean by a standardized school, as understood under the laws of your state?
5. What do you think of the all-year school under which teachers are paid in twelve monthly installments, and are at the service of the community throughout the year?
6. Give your views on the subject of teachers' cottages. Are there any such in your part of the state?
7. Have you a copy of Dresslar's *Rural Schoolhouses and Grounds?* If not, send to the Superintendent of Documents, U. S. Printing Office, Washington, D. C., for a copy. Then study it carefully.
8. Show the relation between the beginnings of vice and the rural outdoor toilets as now usually maintained.

9. Outline your health program for rural children.
10. Do you give the ordinary physical tests for defective eyesight, hearing, etc.? If not, any possible lack of success in your teaching may originate here.

CHAPTER SIX

CONSOLIDATED SCHOOLS OF EFFECTIVE TYPE

1. Rural School Reorganization Best Attained through School Consolidation. The one-teacher rural school discussed in the foregoing chapter will meet the requirements of reorganized rural life. The only difficulty is that very few teachers are available to take charge of such institutions. More ability and vision are required to manage a one-teacher school successfully than to operate a well-organized consolidated school. The real solution of the rural educational problem, therefore, seems to lie in the consolidated farm community school.

There is nothing forced or artificial about the movement to consolidate the small schools now in process of realization throughout the United States. It is indeed the most natural kind of movement. It began in Massachusetts as long ago as 1869, because it appeared to be the only practical solution of a perplexing problem. The movement has since spread contemporaneously from hundreds of centers far removed from each other and has taken on a great variety of forms, though the impulse back of it all has ever been the same—necessity, or at least a desire, to provide time-saving educational facilities in a practical, businesslike way instead of the outworn and ineffective.

2. History of School Consolidation. The movement is too well known to require a lengthy historical sketch. Books and pamphlets in large number have been written on the subject, which give, in detail, the stock arguments for and against consolidation. Most of these may be passed by, as the experimental stage in school consolidation has long been passed. The movement is now, in fact, accepted as good national policy. What school people must concern themselves with is that the new school shall come to the community in its best form; otherwise the old schools had better been left as they were. But first it is desirable to note historically the encouraging growth of consolidation.

There are probably 10,500 consolidated schools in the United States deserving the name. A mere union of several schools, making of them a larger one-teacher school, is not considered as falling within the definition. It contemplates the union of several—preferably three or more—schools, to provide the facilities of a well-graded school. To say that 50,000 one-room schools have been absorbed by the new schools it not to overstate the facts. It is easy to see what this leavening must mean to the 212,000 small schools still untouched by the movement.

3. Partial Consolidation. Communities of the conservative kind often compromise the matter by closing only certain ones of the small schools within the consolidated area, or by retaining the small schools for the pupils in the lower grades. When people object to parting with the time-honored one-room school, or fear to have the younger children conveyed to a central school several miles from home, this plan proves satisfactory, or is, at least, a first step towards complete consolidation.

This kind of consolidation is being practiced in many states, notably in the more conservative. In Missouri, for example, a recent legislative enactment permits both this and complete consolidation. Before the new law went into effect it was practically impossible to get the people to consolidate their schools. Now it is a comparatively easy matter. Under the new law it is common to consolidate a number of small districts, say from four to six or even more, and send all the children above the fifth or sixth year to a school erected at a desirable center. This organization provides good grammar-school and high-school facilities for the older pupils, at the same time that it allows the teachers retaining the younger children to do their tasks better than formerly by reason of the smaller number of classes.

Another important fact is that the partial system, which is really more expensive than complete consolidation, prepares the way for the latter. Once the farm folk of the community have become habituated to gather at the large central school for their community meetings, the smaller schools begin to lose their significance, and are closed one by one.

4. Complete Consolidation. As indicated in the name, this contemplates centralization of all the small schools of the consolidated district at a central point. This affords opportunity to grade the school thoroughly, and, if enough small districts have joined, to organize a real community high school.

In this form consolidation reaches the ideal. Here it can get sufficient funds to provide trained teachers, good equipment and ample land for laboratory purposes. The ideal consolidated school is organized preferably in the open country or on the edge of a rural-minded village. In architecture it is as modern as the best town school. The children's health is considered in the sanitary arrangements. Proper lighting, correct heating and ventilation, flowing water, indoor toilets, athletic fields and playgrounds are all given careful consideration. There is provision for agricultural and general science laboratories. The assembly hall is arranged with a view to using it for all kinds of community gatherings.

The course of study continues to give the universal elements of education first place, as in the past; but it gives, in addition, a new emphasis to local community needs. Nature study, agriculture, domestic science, manual training, physical education, music, and even art are finding prominent place in the day's work, while all the old subjects are taking on more and more of a "farm flavor." The fundamental principles remain the same, but the local application is directed to the needs of the agricultural community.

All the school work is not done indoors, however. The school is set in a large outdoor laboratory. This should never be less than five acres. Many schools have grounds and experimental plats ranging from twenty to sixty-five acres. Here is room for play and athletic grounds, for parking, individual gardens, experimental plats and larger fields and orchards. It stands to proof that the most practical schools of this kind, so far as local application is concerned, give the most thoroughgoing instruction in the general cultural elements, language, literature, history, etc. It is quite feasible to combine the education of the great out-of-doors with indoor study so as to bring about a satisfactory coördination of head, heart and hand.

5. Village and Open Country Consolidation. Ordinarily the open country may be looked upon as the ideal place for a consolidated school. In this, Nature's own environment, it should be easy to set up a good school, untrammeled and unrestricted by city ways and city courses of study, but even here care must be taken lest we get only an "out-moved" city school. Unless it is rooted to the soil and the course of study taken from a rural environment, even this school will fail.

Any rural-minded village can be considered as an ideal place for the establishment of a consolidated school. The district should be planned in such a way as to include all the natural trading community of the village. Care should be taken lest the champions of consolidation reach beyond the natural trading territory of the village in order to include much territory to keep taxes down. There is a limit beyond which it is dangerous to go. In case of a village consolidation, care should be taken to have not less than ten acres of land for school purposes.

6. Rural High Schools. Well-organized rural high schools, with their good equipment in land and buildings and homes for the teachers, are gradually taking their place in rural districts as the "agricultural man's college." Their task is to point the way to contented, remunerative community life. These institutions, where fully organized, extend their educational facilities to young and old people alike—to the children in regular day courses; to the youth beyond ordinary school age, and to the parents, in short courses and extension courses, and even occasional night sessions. The new conception of the rural high school is an institution that combines broad cultural elements with the practical elements, to the end of making the students both thinkers and doers.

7. The Rural High School Must Meet the Demands of Agricultural Life. City high schools are organized for city children; similarly, rural high schools must be organized for rural children. Some people—farmers among them—have the false notion that to differentiate between urban and rural folk in educational matters amounts to a discrimination in favor of city children, and that the whole matter is an attempt to set up an agricultural caste and cut off rural children from the supposedly greater opportunities of city life. The whole is based on the assumption that urban life is superior to rural life, which, to thinking persons must seem utterly fallacious. There is fundamentally no more reason why rural children should attend town schools than to reverse the order and have city children attend school under the benign influence of a rural environment. The Danish folk high schools, it may be recalled, are rural from the towns. As soon as American rural life shall have become fully readjusted this problem will settle itself.

The rural high school course of study must be as broadly cultural as any planned for the urban population—a culture intimately related to present and future problems, rather than to old traditions. But, most important of all, the course of study must be rooted to the agricultural community, to the earth, as both source and background.

8. Ideals to Follow in Organizing Consolidated Schools. A fatal mistake in much consolidation is its appeal to the cheap and shoddy. If this great work is worth doing at all it is worth doing well. Where a community contemplates consolidation, its advocates should strive with might and main toward the highest ideals in school perfection. Here are some of the things to be considered:

The grounds chosen, aside from being centrally located and easily accessible, should be sightly, well-drained, and large—so large, indeed, as to afford room for good-sized experiment plots, school gardens, playgrounds, lawn, and ample space for buildings. Five acres and upward should be the standard.

The school structure should be built as a permanent farm school plant, have a large assembly room, well-equipped classrooms and agricultural laboratories, be sanitary, attractive and in every way as good as the best town school plant. No steps should be taken toward building until after consulting with educational experts, and then plans and specifications should be prepared by a competent architect.

The grounds should have a good shed for cars and wagons.

A principal's cottage should be erected on every consolidated school ground. To this end one of the best of the discarded schoolhouses may be moved in and remodeled. The district will get a monthly rental upon this property. Many states have found this an excellent investment. It is well to repeat again that the teacher who lives his life in the midst of the community from year to year becomes a positive factor in community building.

QUESTION STUDY

1. Give a brief sketch of school consolidation in the United States.

2. Why has the movement been slow in some of the rich Middle Western States, while great progress has been made in many Southern States?

3. Make a study of the best consolidation in your part of the state.

4. Point out the significance of school consolidation in connection with the "trading-center."

5. Why is partial consolidation practiced in conservative communities?

6. What do you mean by "complete consolidation"?

7. Discuss open country consolidation *vs.* town consolidation.

8. Have you visited a consolidated school equipped with teacher's home, garage, barns and other outbuildings? If so, give your impression of the same.

9. Show definitely the importance of having the rural high school meet modern agricultural needs.

10. Contrast the kind of town high school often attended by country children with the new community high school.

CHAPTER SEVEN

THE RECONSTRUCTION OF THE COURSE OF STUDY BASED ON WHAT RURAL PEOPLE OUGHT TO KNOW.

1. Introductory. Do the rural schools of our country teach what a modern agricultural population ought to know in order to get the greatest good out of life? Do the schools provide the kind of instruction required to keep the people in enjoyment of good health and sanitary surroundings? Do the schools prepare the people to earn remunerative livings out of the land? Do they direct them to become useful, responsible members of the larger social group? Do the schools, finally, so direct people that they will devote a well-earned leisure to ethical and esthetical pursuits in the country for the improvement of self and the upbuilding of the community? If the schools are organized to accomplish these things they approach the modern conception of education. If they limit themselves to formal subjects of the traditional curriculum, it is doubtful if this end is attainable.

2. What is Meant by Modern Conception of Education. What, then, do we mean when we speak of rural education, in this modern sense? Just what ought the farmer and his wife to know in order to attain a happy, healthy, remunerative life?

In the first place, they must have a good mastery of the ordinary tools of education to aid them to construct the larger enduring superstructure of education. They must know how to express themselves in good English; they must be able to spell the words of their daily vocabulary; they must be able to figure correctly and make such simple calculations as fall within the realm of ordinary usage. This is the beginning of their education—the "open sesame" to the precious and essential things of a full, rich agricultural life.

The second stage in the education of an agricultural people must harmonize their daily lives with the nature environment in which they dwell and labor, so that they will love it and understand its wonders and mysteries. It must make them broad enough to know and care about the great physical and social world lying beyond their own precincts. In this way will they learn to interpret the phenomena of the nature environment and gain an understanding and sympathy for the activities of the world at large. This second phase of their education must make them independent thinkers and leaders, to enable rural folk to take their place side by side with the urban population to do their share of directing, of controlling, of dictating the affairs of the nation.

3. An Interesting Study. In 1913 the United States Bureau of Education began a study of what rural people ought to know in order to live wholesome, contented and profitable lives on the land, or away from it if they should become attracted by the call of the city and abandon the land. Rural people in every section of the country have been appealed to for their views on the subject. Agricultural leaders and rural life experts in large number have been communicated with on the same subject. The keynote that has sounded through all the responses is that the rural schools of to-day spend too much time in acquiring the mere working tools of education, since the subject matter is "cumbered with all kinds of unnecessary timber" and the methods of presentation are inadequate; and the schools do not devote enough time to the things which serve a real purpose. It is the consensus of opinion of these people that the school should no longer limit its activities to the four walls of the schoolhouse or the covers of the textbook. Every activity of the community should be reflected in the daily course of study—the farm place, the fields, the streams, the forest, the trading center should all become laboratories, or at least subject materials, for the modern school.

4. How Tradition has Influenced our School Work. The average thinking person is willing to concede that there is too much of the abstract, too many empty phrases, taught in the school to-day, largely because these things were in the course of study handed down from the past. It is not uncommon, even to-day, to hear individuals aver that what was good enough for the fathers is good enough for the sons! What is needed in the schools, they say, is not more of the new-fangled subjects, but more of the three R's! So we have continued as creatures bound by tradition to offer children material largely outgrown and in no sense serving a modern useful purpose. But with the reconstruction of the study course a real worth-while change is coming.

5. Progressive Teachers not to Blame. In justice to the individual teachers it must be said that, if they had been at liberty, many would have cast aside the traditional rubbish for which they can see no justification and have given the children instead the meat of living and present needs. Teachers have repeatedly met the writer with such statements as these: "What shall we do? Our school boards insist that we eliminate all the frills and stick to the essentials—the three R's." Or, "We are obliged to follow the state course of study; if we devote our time to teaching what is not in the course of study, our eighth grade pupils will fail in their examinations for promotion to high school." This is, unfortunately, quite true. School officials, particularly in rural communities, often dictate to the teachers what they shall and shall not teach. And what do most of these officials know about school needs? Their own school experience has probably been limited to the pioneer school, which is an inadequate basis from which to judge what children should study nowadays.

The established courses of study are, unfortunately, very often outlined to suit the textbooks in use, which are themselves cumbered with much material that is traditional and obsolete. It is interesting to examine some of the state and local courses, from state to state, and note the unavailing efforts made to satisfy modern demands by patching a little here and a little there, like patches on an old garment, thereby overcrowding the already heavily loaded course. The mistake is to think that such a patchwork will satisfy the demands of a great agricultural people, striving to set its own house in order in the midst of the present epoch-making national transition.

Before the readjustments can be realized the course of study for rural schools must be fundamentally recast. New textbooks must be written, specifically for the twelve or thirteen million rural children. State and local study outlines and syllabi must be modified to suit these needs, and educators instead of laymen must decide what shall be taught in school and what shall be left out.

6. The New Course Offers a Broader Culture, Based on Vital Things. The farm folk in America have suffered just as much from want of real soul-reaching culture as from a lack of practical and technical information. But it should also be understood that a course of study founded on real life purposes can be made genuinely cultural without laying much emphasis on ancient language and philosophy. We are so accustomed to associate culture with subjects of little immediate availability that the living, vital subjects we have under consideration in the modern curriculum are often looked upon as utilitarian and materialistic, and hence not genuinely educational. This is, of course, absurd.

The test should be for the subject matter to serve a real purpose, be it spiritual or material. The great inheritance of literature and art, for example, is not to be excluded from the curriculum, but *some* portions of what is called literature and art will be excluded. Language is not to be excluded; but dead language will have no place in the reorganized course, because it cannot pass the test of serving a useful purpose, at least for rural people. In the Danish Folk-high schools and agricultural schools Latin has never had a place, yet the Folk-school is the most cultural of schools. German and English are taught in these schools, but not because of any real value in themselves. Modern languages are offered in these schools because they are necessary as a means of communication by the young farmers who go to Germany and England as agents of the coöperative agricultural organizations.

7. Reconstruction Will Come as a Gradual Evolution. The writer's impulse would be to reconstruct the rural curriculum from first to last, at once. Nothing ought to be retained which cannot be shown to serve a useful purpose. The new materials ought to pass a similar test. The old plea that a subject is "good mental discipline" can no longer save it from being discarded. Neither can the plea of "affording information of some sort" be accepted. Encyclopedic wisdom has no place in the schools. All informational materials in the curriculum must serve a vital purpose, immediate or remote, in order to retain a place.

However, we will probably have to content ourselves with a more gradual modification of the present curriculum, but this should be carefully planned and must be fundamental. In the process of reconstruction, the following steps must receive consideration: (1) a thorough elimination of everything that does not meet the test of useful purposes; (2) introduction of subject materials adapted to help rural people attain happy, healthful and remunerative life conditions; (3) redirecting whatever has been retained in the curriculum after the first elimination, to give it a more direct application and utility.

8. The New Community Schools to Be Laboratories for Reconstructing the Course of Study. The new community schools, both the one-teacher school and the consolidated, must become laboratories in which to bring about these changes. Such forward-looking educators as Marie Turner Harvey, of Missouri, and Hetty Brown, of South Carolina, have accomplished much already in their one-teacher school laboratories; and many of the better consolidated schools are making real progress. The chief obstacles in the way of immediate success are two: the narrowness of the teacher's own vision and his lack of zeal to stick to the work in a single community until the enterprise can win public approval and recognition; and the common want of foresight and appreciation on the part of school boards and patrons

QUESTION STUDY

1. What do you mean by the statement that "tradition has influenced our school curriculum"?

2. Distinguish between tool subjects and content subjects in the course of study.

3. Why are you unwilling to accept a school subject solely on the ground that it affords "good mental discipline"?

4. Does the modern conception of education call for a change in the way the three R's or formal subjects are taught? Give your explanation.

5. What is your test to determine whether or not a subject is "cultural"?

CHAPTER EIGHT

ELIMINATION AND REDIRECTION IN THE COURSE OF STUDY

1. The Old-Time Rural Curriculum the Result of a Gradual Accretion. The rural curriculum, as we now have it in the schools, has gradually become enriched with new material, much of a practical nature and some poorly adapted to rural schools. Methods of teaching have likewise improved with the growth in number and efficiency of professional schools. The rural schools are undeniably more attractive to the pupils than were the schools of our youth. New subjects have taken their place in the daily program, and others are in the process of getting recognition. It is unfortunate that this enrichment has come as an accretion and not as a natural growth. With the addition of new subject matter there has not been a corresponding elimination of the old and wornout. This accretion process has given us a curriculum with much useless rubbish that must be cleared away to give place for new practical subject matter.

The grammar, geography and history of the school of 1840 and later were early supplemented with physiology. A little nature study and language lessons were added in the more progressive schools. Drawing and music next sought admission. Finally, came the new industrial subjects—agriculture, manual training, physical education and household arts—striving to become the pivotal subjects in the new curriculum.

2. Steps in the Plan of Reconstruction. Leading educators are giving much time and thought nowadays to scientific tests and measurements in education, to determine the effective value of school subjects as they are taught. Elimination of useless subjects and economy of time in study likewise are receiving much consideration. But the practical application of all these studies is usually limited to the city and town schools. Very seldom is the influence felt so far downward in our educational systems as the rural schools. A few attempts have been made, it is true, to reorganize the great mass of subjects resulting from the gradual accretion into a satisfactory course of study for rural folk; but most of them have been too timid, and therefore of little practical value.

Before real results can be obtained we must eliminate all materials no longer serving a useful purpose; we must freely introduce new materials required to meet the conception of modern rural education; we must readjust whatever is retained of the traditional subject material to meet the new demands.

3. Elimination of the Useless Accumulations. The first step, then, is to rid the course of study of all useless and cumbersome materials. The test of useful purpose must invariably be applied. In arithmetic, for example, tables of weights and measures belonging to the special trades and professions, complicated problems in percentage, partnership, exchange and the like, can pass no test of present usefulness in rural education, and will accordingly be eliminated. In English, for the same reason, the children will no longer be obliged to struggle with interjections, appositives, conjunctive adverbs, formal parsing and diagramming. In physiology we will omit the old anatomical catalogue of bones, muscles and parts of the alimentary canal, suitable only for embryonic medical students. Similar eliminations will occur in spelling, in geography and in history.

4. Inclusion of New Subject Materials. The principles promulgated above require that we include definitely in the program the industrial arts—agriculture, manual training and home economics. Of these, agriculture, in the sense meant here, is really elementary science combined with practical agriculture, or nature-study agriculture. Manual training now comprises all useful handwork for boys and girls, aside from what is included in the term home economics. The latter embraces what is generally known as domestic science and domestic art.

The new emphasis on the old subjects has for all practical purposes given us several new studies. The old arithmetic has become, or is becoming, rural arithmetic and farm accounts; the old physiology is being transformed as rural hygiene and farm home sanitation, and the old civil government is gaining a more practical sphere as rural community civics. The change in these titles is sufficiently suggestive of the new transformation in point of view and content, and does not need any further explanation.

5. Final Redirection of the Old Subjects. When the elimination process is completed, the work of redirection begins. After the destructive process comes the constructive. The fundamental principles of the average subject are ordinarily retained as before the elimination began, the local application alone is modified to bring the problem within the experience of the pupil's daily activities. In the arithmetic class, for example, it would quicken a pupil's interest and add to his practical knowledge and efficiency to send him with pencil, pad and three-foot rule into the school yard to calculate the cost of erecting a hog-tight fence around the premises, using definitely specified materials, or to give him problems in growing farm crops, dairy problems, poultry problems and the like. Nature environment and practical farm activities can furnish him materials and themes without number for his reading and composition classes. Even the spelling words can be gleaned from the experiences of daily life. Similarly, in his geography class he will begin to spend less time on the location of such places as Timbuktu and Pernambuco, Bankok and Teheran, and more to a study of land and water forms of the community, the farm as an industrial center and its commercial relations to the larger community, and other equally suggestive topics. The field of adaptation is wonderfully large, even in these old formal subjects.

Since there are not yet many satisfactory textbooks to aid the teachers in their task of redirection, personal ingenuity must play an important part. Farm life readers have appeared on the market, as have also rural science readers, rural community civics, rural arithmetic and farm accounts, and books on farm shopwork. Thus the beginnings have been made. It is good news also that several large publishers of school books have recently planned complete series of textbooks for rural schools. Meanwhile, let teachers use the teaching materials ready and waiting to be used. What better reading materials are there anywhere, for example, than the gleanings from the standard agricultural and other rural periodicals? What better geography text than the school yard and farm place, the hills and valleys, the fields and forests? What finer topics for study of citizenship than country roads and bridges, division-line fences and schoolhouse upkeep and beautification?

QUESTION STUDY

1. Show how the school curriculum is the result of a gradual accretion, instead of natural growth.
2. What do you think of the proposed plan of reconstruction? Does it seem too radical?
3. How far ought the elimination process be carried?
4. Just what is meant by a "new emphasis on the old subjects"?
5. Give illustrations of what is meant by the redirection of the old subject matter.

CHAPTER NINE

VITALIZING THE "COMMON BRANCHES"

1. The Badly Taught English Language. No subject in the rural curriculum has been so badly taught as the English language—particularly composition and grammar. It is a proverbial saying that the rural children dislike both these subjects and shirk them whenever they can. If rural pupils enter town schools for advanced work, their English preparation is very often below grade, even though they may be well abreast of the town children in other subjects.

The reason is not far to seek. Our school teachers have sought to convey this language ability to their pupils through the dreary rounds of formal grammar, with its elaborate classifications, its close distinctions and highly specialized machinery. Inductive language lessons which should grow out of the fertile language materials found in every school subject have been neglected. Oral and written composition, through which language content takes form, has been limited mostly to occasional purposeless essays. Finally, reading and spelling—the tools of language—have been taught as things apart from the language arts, not so much to aid the pupil to attain a deep appreciation for and lasting understanding of the mother tongue as to acquire a facility in verbal gymnastics.

2. How Much English Grammar to Teach. Grammar is the science of speech rather than the art of speaking. Since art of language antedates language as a science, it is illogical to expect mere children to gain a mastery of grammar. Men had been conversing in the vernacular and were writing it for ages before the logician formulated his science of language. Children learn to speak the mother tongue by a natural process which is inductive. Grammar violates this natural method. It is an excellent means by which to clarify and definitely fix our standards of language-accuracy, to be sure. But instruction in grammar should come later, after the child has learned to express himself in reasonably good English, orally and in writing.

Formal grammar has little or no place in the elementary rural school. Grammatical forms should be introduced incidentally by the teacher in connection with the language lessons. The simple essentials of grammar may be taught advantageously during the last half of the eighth grade, in connection with the language work, as a means to help the pupils to clarify their impressions and to fix definitely in their minds the few fundamental principles with which everyone should be familiar.

3. Language Teaching, the Important Thing. The chief purpose of language teaching is to train the pupils to express themselves in good, forceful, accurate English, both spoken and written. In the process of achieving this universal art the pupils are also trained to think, for no one can express himself clearly and accurately without making use of his powers of thought. Furthermore, they gain an appreciation of good literature, and ultimately their vocabulary becomes enriched and enlarged so as to enable them to give words the exact shade of meaning. Teachers generally concede that language instruction will accomplish all of this for the pupils; but either the preparation for this kind of instruction has been faulty in the professional schools or else the old "grammar way" is too firmly fixed in the average teacher's mind to be readily thrown over. For certain it is that teachers, whether they realize it or not, continue to emphasize grammatical machinery to the serious loss of practical language teaching.

4. Methods to Be Used. Children learn to use language by imitating the speech of others. Every language expression that appeals to the child is stored up in memory and later reproduced. In other words, the child must depend on the spoken and written language of his elders for his own. He copies the speech of his father and mother, and of his playmates. He learns new words from the stories that are told him and the books that he is taught to read. How well he learns his mother tongue depends entirely upon the environment in which he lives and the ability and painstaking care of the teachers under whose instruction he comes.

It is evident from this that language, to be taught well, is much more than a book subject. Language books should be used as guiding-threads from the third school year upward; but aside from this the average language lesson should grow out of the actual daily needs of the children. These vary in different communities. The common errors of speech discovered in conversation or during recitation, or on the playground or at home, can be classified and organized as regular school language work. Eternal vigilance on the part of the teacher has its rewards in language teaching as in no other subject.

Language, then, should be considered not only a phase of every industry and activity in and out of school; it is equally a distinct and important phase of every school subject. Only as it is so valued by the teacher and pupils will its teaching result in permanent good. Language is closely correlated with every subject in the daily program. It is so necessary to clear thinking and to adequate expression in each of them that a criticism of its teaching is at the same time a criticism of the teaching of the various school subjects. Moreover, the first and most logical place to apply the principles learned in the language lesson is in the other school subjects and in the other activities of the school and home. If they are not applied there, it is unreasonable to expect their application elsewhere.

Every subject has advantages for some particular kind of language training. Arithmetic helps in precise and exact expression. Reading presents a fine opportunity for imitation and permanent ideals—a chance to compare our own efforts with the efforts of those more expert than we. History is excellent for narrative and argument, both oral and written, and only poor history does not lend life to composition and only poor composition does not give clarity and interest to history. Geography and arithmetic can scarcely be surpassed for description and exposition. What the child knows well in these subjects he expresses clearly; he readily learns the relationship between understanding a topic and his ability to express himself in regard to it.

5. Suggestive Composition Themes. The average rural school has given little time to oral and written composition as a part of the language work. Composition, too, should be looked upon as a phase of every school subject, rather than as a separate study. Composition is a natural practice, and begins as soon as a child talks. The teacher's task is to draw out the child's natural abilities to compose, to aid him to deepen his impressions, and to find a satisfactory means of expression, on any theme or subject that may appeal to him. Instead of helping the child to find the right kind of outlet for his own little thought-world, teachers are prone to repress the children's efforts at spontaneous expression, and so forever throw a pall over their desire for individual effort.

The teacher must take the child in its own thought-world, and, while directing him, should be careful not to impose his composition themes on the child, who must be permitted to say what is in his heart to say. The fields and hills, and woods and brooks, the school and home garden, the home projects, the children's play life, their chickens and calves—all are full of vital interests that may serve as themes for oral and written composition.

In the nature-study agriculture class, by way of illustration, we have an abundance of such themes as these: "Birds that I know"; "Some insect friends and foes"; "My home garden"; "The poultry club"; and "The tomato canning club." Mary will select for her eighth grade theme, we will suppose, the first title in the list. Immediately the correlation of subject study begins—nature, natural history, geography, agriculture, and English. She will study the birds and their habitat first hand; she will read up on them in the encyclopedia and in books provided by the teacher. Periodicals will be studied, and pictures of familiar birds, probably gathered from various sources for the booklet, which should grow from day to day as the work progresses.

This is an illustration of the possibilities of the longer composition. All, certainly, need not be of such length or depth of study. While the weightier theme is under way, oral and written composition of the paragraph kind continue a part of every subject in the program.

6. Place of Spelling in the Rural Schools. Spelling, too, must be considered a form of composition. Its function is to provide the correct form of words needed in everday composition—particularly written composition. Both oral and written spelling are valuable; but since the pupil needs to spell the word only when he wishes to write it, oral spelling is less important than written spelling, and is valuable chiefly for review, for giving variety, and because a large number of children are "ear-minded" rather than "eye-minded."

The first principle in spelling which should receive the teacher's careful consideration is that only such words as are needed in the pupils' regular exercises from day to day—that is, their own vocabulary—should be included in these spelling classes. This is the first important fact for the rural teacher to bear in mind and to act upon.

7. Making Your Own Spelling Book. The average spelling book contains from 10,000 to 15,000 words, all of which the pupils are expected to spell before getting through school. Careful tests have demonstrated that the average adult uses only between 350 and 550 words in his written vocabulary. Similar tests made of school children give like results; very few of them use more than 350 words in their daily tasks. Under these conditions we can see the folly of forcing pupils to learn indiscriminately long lists of words, grouped by columns without reference to use. The child too often fails to get a good grasp of the simplest everyday words, because he has to struggle with long lists of words lying almost wholly outside of his own vocabulary. One may ask, should spelling books be used at all, or should spelling lists be prepared by the teacher and used instead? If all teachers had the necessary power of discrimination, unquestionably the better method would be for them to select their own lists exclusively, but the average teacher has not the training necessary to do this delicate task well; hence it will be necessary to continue to depend largely upon spelling books. The books, however, should only supplement the regular spelling exercises, not supplant them. The teachers must be clear in their own minds on this point.

The best method of presenting words for spelling is in context, instead of in lists of isolated words. A paragraph, stanza, quotation or letter, for example, may be selected in the book or placed on the blackboard, with the words to be learned emphasized in some way—perhaps underlined. They may then be taken out from the context, carefully visualized, written, pronounced correctly with meaning clearly understood, special difficulties pointed out and study directions given.

Many successful teachers draw their spelling lists from every class subject. For example, in the agriculture class the pupils may falter in the pronunciation of certain words—an evidence of faulty visualization, or the meaning is not clear to the pupils, or the words are misspelled in the written exercises. All such words should be listed immediately on the blackboard and kept there as a part of the agriculture or civics exercise until definitely mastered.

8. How to Teach Reading. Reading will always continue as a most important subject in the rural curriculum. Success or failure in teaching reading depends, of course, wholly upon how it is taught. Does the teacher have a clear comprehension of the aims and purposes of teaching reading? Does he understand what the children of the different grades or groups should read? Does he know how to correlate reading with the other subjects in the program? Does he utilize the right wealth of information of a social-economic nature available in supplementary readers, and the current periodicals—particularly the rural press?

Reading has for its aim more than mere ability to convey to the mind the thought contained in the printed page. The process of learning must give ability to judge the worth of what is read, to discriminate between what is good reading and what is bad; to create a taste for the best in literature; and to establish the reading habit, that it may become a life process. Good reading is inseparable from a certain attainment in oral expression; but the mechanics of reading is not the aim and end of reading. Reading is valuable only as it appeals to the child's instincts and interests, as it stirs him to action and opens for him channels through which his budding activities can find an outlet.

No reading materials should be used which cannot stand the test of useful purpose. That is, do they appeal to the child's instincts, interests and understanding, at the same time that they appeal to his social, ethical and esthetical nature? If the selections stand this test of useful purpose, they should be included; if not, they should be rejected.

The reading course, both in method and selection of material, should lead the child by natural steps through mere formal word mastery to thought mastery, till ultimately formal reading blends with the content subjects, and so ceases to be of further use as a separate teaching-subject.

9. Writing Versus "Penmanship" in the Rural Schools. Very little need be said on the subject of writing in the rural schools. So long as writing was taught as "penmanship," the schools were inclined to feature it as an accomplishment with emphasis on flourishes, scrolls and complicated monograms. Writing is a mechanical process, with little or no esthetic or intellectual value. The sole purpose of writing in school should be to enable the pupil to record his thoughts with legibility and speed.

Any system that stresses these two essentials and enables the pupil to learn the art with the least expenditure of time and effort may safely be used by the teacher. Several methods have come and gone, all with many good points to recommend them. The Spencerian system and the vertical system have had, and still have, many warm advocates in the schools. Both have their excellent points, and some natural faults. The Palmer Method is popular in most sections of the country at the present. A commendable feature of this system is the assistance rendered teachers by the publishers in mastering its essentials, and the interest in class progress demonstrated by the publishers through writing contests based on quality and speed tests.

The teacher would do well to adopt some one good system or method; otherwise failure is likely to befall. But, how long should pupils be expected to do writing as a distinct class exercise? Only long enough to attain a reasonable standard set by the teacher. As soon as this standard has been attained, the pupils should be excused from class drill, with the understanding that they begin again any time they drop below the teacher's standard.

10. Mathematics in Rural Schools. A complete course in mathematics for rural schools should include practical arithmetic, farm accounting and simple phases of plane geometry dealing with measurement and land surveys. All this, however, should be taught under the single head of arithmetic.

The eliminations must first be made. The following list of topics has been agreed to by several leading educational authorities. Teachers can safely accept it as the expression of the best progressive thought on the subject. These topics may be omitted: Greatest common divisor; complex fractions; Troy weight, apothecaries' weight, surveyors' measure, tables of foreign money, annual interest, compound interest, true discount and partial payments, stocks and bonds (as usually taught), and foreign exchange; compound proportion; cube root; and metric system (until the government enforces its use).

The constructive work falls under these captions: (1) Fundamental processes, and (2) practical applications. Under the first head there should be thorough work in addition, subtraction, multiplication and division; in common and decimal fractions, and factoring; tables of simple measurements and United States money; and practical rules in mensuration. Under the second head the problems should be based on daily activities. Many farmers fail because they do not know how to keep account of receipts and disbursements. They cannot point out with certainty where the financial leaks are. Not always can they borrow money to advantage. They are often helpless in matters of organizing coöperative enterprises which call for mathematical calculation and some business preparation. The necessary constructive problem material may be summarized as simple business practice and farm accounting; banking problems; fire, hail and life insurance; taxes; school and district bonds; problems involved in organizing coöperative creameries, elevator companies, etc.; fundamental problems in soil-building, crop production, shipping and production; thrift problems in machinery upkeep and depreciation, and upkeep of farm buildings and surrounding premises; and other problems in farm and home management that will suggest themselves to teachers and pupils from day to day as they are needed.

11. The New Geography Teaching. Geography is a study of the earth's relation to man—a study of how man lives upon the earth, how he gets his living out of the earth, and his social and economic intercourse with other men. For these reasons the phases of geography studied by rural children should be related to their daily lives as children and as grown-up people. The rural schools have been slow to make use of the vitally interesting geographic facts abounding in every rural community. Instead, they have contented themselves with teaching the common terms and definitions used in describing land and water forms from the printed page of the book rather than from the hills and valleys, brooks and ponds, lying at the heart of the school community! Even yet are rural children obliged to spend their time in memorizing definitions of capes and headlands, peninsulas and isthmuses, located somewhere on the map; their time is taken up with "bounding" states and countries and hemispheres, with locating state capitals and state metropolises and countless other facts just as dreary and profitless.

An excellent place to begin studying is the schoolroom. The teacher may begin by teaching directions as related to the schoolroom and the schoolroom as related to the out-of-doors. Next, it is well to locate the schoolhouse and grounds in relation to other points of interest in the community, as shown in the brief outline below. The children should by degrees be made familiar with local topography and through it gain a comprehension of the varied features and vast proportions of the earth. Then should come a study of the history of the farm; a study of its soil; its drainage; the roads that bound it and lead away from it, out into the world. Next, it is essential to know the products of the farm—what are to be used at home and what exchanged for products of remote places and countries. From this study of the farm we may turn to the whole community and its trading center, from which our outward exploration of an interesting, mysterious world continues. There is a vitality in this because the children play a real rôle in a living world. Their own community activities provide them with living interests that make children realize that they are a part of a real, throbbing world.

12. Rural Community Civics. Rural America urgently needs government to make it physically wholesome and healthful; to protect it from the social vice which finds, in the rural community's unprotected condition, an opportunity to debauch the unsuspecting youth; to give it efficiency and economy in the management of its schools; the construction and upkeep of its public highways; and in the organization of its quasi-public social-economic institutions and organizations.

The rural school has not done what it can towards training for citizenship. There is too much *talking* about citizenship in the schools, but too little *living* it from day to day. The writer, in his time of early school, was obliged to begin his preparation for citizenship by committing to memory the entire Constitution of the United States, beginning with the Preamble and ending with the last amendment. There is no objection to the children learning the essential points in their national and state constitutions; but all this becomes dead and meaningless if the study ends there.

Citizenship must be *lived* in the school from day to day. It can be made a part of every school subject, and really need not be taught as a separate subject, or, if it is, a practical community civics should be used. The history period generally provides time enough for the book phases of the study in the one-teacher school. Geography, when well taught, emphasizes section lines and highways and road-overseers; agriculture brings in division fences, windbreaks, and questions of drainage areas; arithmetic concerns itself with assessors and taxes; and so on indefinitely. He alone is a great teacher of civics who is able to imbue his pupils with their great responsibilities and opportunities so that they will not fail later in life to respect the rights of their neighbors and keep out of all unjust disputes over line fences and drainage ditches and private roadways; so that they will not revert to absentmindedness when the assessor comes to value their real and personal property; nor shirk their duty in road building and its upkeep, or insist that their own section line be graded before those of their neighbors.

Men and women so trained will be ready, when time calls, to fill with ability the positions of school trustee, highway engineer, sanitary inspector, township supervisor, county commissioner, and other places of trust in a rejuvenated rural government.

13. Singing in the Rural School. In the days of the old singing-school master there was probably more song in the rural community than there is today. To begin with, rote singing was considered an important part of school work; and all the young people joined the winter singing class at the schoolhouse as an important part of community social life. The "song birds in the heart" of our rural folk have been dumb, it is said, ever since the close of the district school period when the singing master departed for other fields of activity.

Every daily program in our schools has its opening exercises, which should comprise song, story and practical current topics—all made so attractive that the children will be eager to reach school in good time for the opening. Music should, of course, be an important phase of the opening exercises. The teacher can also find a little time in the afternoon for a singing exercise. Many schools now set aside twenty minutes for the study of music three days a week immediately before closing school.

If the teacher can read music—and what teacher should not know how?—he should teach the subject as a regular class exercise. Only in case of the teacher's inability to instruct in reading notes should rote singing be used.

QUESTION STUDY

1. Do you agree with the writer that English is the worst taught subject in our course of study?
2. Discuss the relative importance of language study and technical grammar in the rural schools.

3. Why has there been so much grammar and so little real language study in rural schools?

4. Do you agree with the writer as to the suggested eliminations in grammar?

5. Are your language lessons interesting and attractive to the students?

6. Do you correlate language work with other subjects?

7. What stress do you place on spelling in rural schools?

8. Why is written spelling more important than oral?

9. Is there danger of over-doing "writing" as a formal school exercise.

10. What mathematics ought to be included in the rural course?

11. What elimination have you made in your arithmetic classes?

12. State what you mean by a new emphasis on geography as taught in the school.

13. Distinguish between rural community civics and the old civil government.

14. To what extent do you employ public school music in your classes?

15. Is it true that "the best part of heaven on earth is music"? Explain.

CHAPTER TEN

PLACE OF THE "INDUSTRIAL" SUBJECTS

1. Food, Clothing and Shelter Come First in List of Human Wants. Until these are provided a people, whether savage or civilized, will pay little attention to the other desirable things in life. If modern agricultural people, therefore, are to live well-rounded lives, they must first of all be put in position to make a good living out of the land.

In the United States about seventy-five per cent of the nation's wealth comes immediately out of the land, in one form or another. The farmers are the greatest wealth-producers we have, although not the greatest wealth-keepers; for, under the present system of agricultural organization, the farmers are able to keep only a small portion of this wealth for themselves. The schools must teach new things not alone in agricultural production acre for acre, but must be of real assistance in preparing the products for the markets, and in their ultimate marketing.

When economic care shall have been lifted from the agriculturist's heart and shoulders, he will be more ready than now to devote his leisure moments to the ethical and esthetical sides of life.

2. School Agriculture Based on Nature Environment. Certainly it is true that there cannot be really successful living in the country if the individual happens to be out of harmony with the wonderful phenomena of nature round about him. Those who get the most out of country life live close to nature. They know and love the created things—know field and stream, weather and soil, fish and birds and insects. The really good farmers are great naturalists.

With us, rural children have lived largely in the very heart of nature and yet remained strangers there. The Danish children study blade and leaf and flower from earliest infancy. This is the work of the school and is begun while the child mind is plastic, and sympathetic and loving. Such children are never in danger of being turned out by the school, shrewd, calculating men who own the soil chiefly for the money they can wring out of it. In our country we are unfortunately prone to judge things by the commercial standard; the so-called "practical" traits are inherent in us. Here begins the work of the new teacher. He must be able to take the rural child in its own little world and lead it along the pathway of life, directing its native adaptabilities, sentiments and powers, and there develop in the child breast a sympathy with its environment, and in the child mind an understanding of nature's ways; then, once awakened to the surpassing beauties of rural environments, the American boy and girl will no longer be in danger of deserting the farm for the man-made glitter of the city.

3. Nature-Study, Agriculture and Practical Projects. There is always a danger when one teaches agriculture in the schools that he will lay too much emphasis on the practical and useful phases of the subject and neglect its all-important background—the nature environment. We can never lay too much stress upon this fact. There are those who have taken up agriculture as a concession to farmers and farming when, by very nature, it should always have been part of the school curriculum. Such teachers have hastened to make it a dollars-and-cents study, regardless whether or not the children had the preparation, gleaned from contact with the great out-of-doors, to make their study from the point of view of little naturalists.

It has been suggested that the general phases of nature study should occupy the pupil's attention for the first five years in school, to be followed in the last three years with agriculture, or, more correctly speaking, nature-study agriculture. It would be unfortunate at any time to lose sight of the nature-study phases; although, of course, the agricultural application must become more and more apparent as the years advance. The entire eight years' course may be considered as a cumulative growth, unmarked by any break to show where nature study ends and agriculture begins.

The teaching cannot be limited to a textbook or manual, although these are essential enough as leading-threads for the last year or so. Agriculture must be taught in the great laboratory of nature. The school ground, including experimental plot and garden, must come first. Then there are orchards and cornfields and meadows which can be used; and corn and cereals, barnyard fowls and other animals, to be brought to school and studied. Many find time to make their grounds beautiful, test all seed corn for the district, bud all the peach trees required to plant the orchards of the whole countryside, grow corn and vegetables for the annual contests, and still have an abundance of time for the other school tasks.

4. The School Organized as an Agricultural Laboratory. The well-equipped rural school of farm community type is planned as a great agricultural laboratory, or nature laboratory. It includes large school grounds, ample for play, with room for flower beds, shrubbery and trees, a common experiment plot and garden, with individual plots for all the children. If, for any reason, such as short school year and difficulty of caring for it during the summer vacation, a school garden should prove impracticable, a home garden may be made to answer the purpose.

In any case the instruction must be informal. There is no real objection to using a textbook as a manual, but mere textbook courses in agriculture are proving futile and should be discouraged. Indeed, it is just as practical to teach chemistry and physics from books alone as to teach a love and understanding of nature and its wonder works from within the covers of textbooks.

5. Industrial Arts Teaching in Rural Schools. Industrial arts, in a broad sense, embrace general industrial work, manual training and home economics. Of these, general industrial work should have a prominent place in every rural school program for all pupils throughout the first five years. Thereafter, for the last three years the work may differentiate as manual training for the boys and home economics for the girls.

It is difficult to find time for a good, constructive course of industrial work in a one-teacher school, although some effective work can be done. In the consolidated school the courses may be outlined definitely and taught as successfully as in town schools. The two-teacher rural school can organize its industrial program very satisfactorily, particularly if one of the teachers is a man. He can give the work in agriculture and manual training, while the woman teacher instructs in home economics and general industrial work for the lower grades.

6. Manual Training in the Consolidated School. Every consolidated school should organize its manual training work on the basis of actual community requirements. The workshop need not be equipped with expensive machinery; plenty of bench room for woodworking, a small forge, a corner for harness repairs and some ground space for cement work are really all that are required. The boys should also be encouraged by their teachers and parents to set up a workshop on the farm to do home projects work and farmplace repairs.

The boys should be taught to handle ordinary working tools. They should be taught to repair tools and farm machinery, to construct work-benches, wagon-boxes, non-saggable gates, poultry colony houses, testing screens, etc.

The course in metal working should be no less practical. Every farmer can save time and expense by knowing how to temper and sharpen his own plowshares and set his own horseshoes. This kind of work is being offered in scores of large rural schools over the country.

For similar reasons, the schools are beginning to give instruction in cutting, fitting, sewing and oiling leather. Every farm boy should know how to repair broken harness, and in an emergency to fix the drive-belt of his stationary engine or threshing machine.

Cement as a building material has in recent years become so popular that some people like to think of this as the cement age. Here, also, the rural school should be of direct use by offering simple work in cement mixing, inlaying foundations and walks, in molding plain cement blocks, fence posts, drinking troughs, and other useful things for the farm.

7. Manual Training in the One-Teacher School. The first requisite is a teacher—usually, though not necessarily, a man—who understands manual training and is able to sense the demands of the farm home in this respect. For a tyro to undertake the work is sure to end in failure.

Another important aid is the district or county supervisor of industrial work. He can generally visit the school often enough to plan the projects with the teacher and have general oversight of the course.

The writer has in mind a county in Northern Minnesota, where he visited forty or more one-teacher schools. Practically every school had two manual training benches set against the wall under the high, closely banked windows, or in their own separate rooms. Of eighty-five one- and two-teacher schools in the county, fully sixty had benches and good sets of tools. A county industrial supervisor directed the boys and girls in the manual training classes. He traveled the rounds of the schools, and required certain definite tasks to be done in his absence, the directions being given in multigraphed sheets sent out from his office. Like work is done in every state of the nation.

8. Home Economics in Consolidated Schools. In the consolidated schools the work in home economics can be made quite comprehensive. The courses of study might well fall under such heads as food, clothing and textiles. All rural schools can offer home economics in some of its phases, though the larger consolidated schools alone can do the work adequately. If the pupils have taken the general industrial work in the lower grades they will have had a survey of the entire industrial field, including considerable reference to the three topics of food, clothing and textiles, which become the specific study topics from the sixth grade onward.

9. The Hot Lunch in the Smaller Schools. One-teacher schools can at best offer only informal work in home economics. If a man teacher is in charge, he will probably be obliged to limit himself to informal work in connection with hygiene and sanitation, on such topics as hygienic clothing and effect on the human body of proper and improper food. He can also do some practical work in a study of textiles in his opening exercises. But the average woman teacher has greater opportunities for effective work. There is certainly not a single rural school where some practical work in sewing cannot be done. As for cookery, is there a single school so small, so helpless, that it cannot approach this phase of home economics through the noonday hot lunch?

Primarily, of course, the hot lunch, in the small school, is popular because we are all learning that a warm meal at midday vitally affects the child's efficiency and is a wonderful aid in the afternoon's study. It is true, at the same time, that in many communities this innocent little lunch has been the means of bringing about a satisfactory coöperation of school and home. In many instances on record the hot lunch has been the first step in organizing a school-home economics course of as great benefit to the farmer's wife as to his children.

QUESTION STUDY

1. Define manual arts and industrial arts; manual training and home economics.
2. Is there any difference between industrial education and vocational education?
3. Can it be said that manual training and home economics, as emphasized in the above paragraph, have some vocational aspects?
4. Just what industrial work are you making use of in your elementary grades?
5. Have you introduced manual training in your school at all? If not, would it not be advisable to begin now?
6. Is it practicable for a man teacher to give daily hot lunches in his school?
7. Do you have daily hot lunches? If so, explain how the work is sustained.
8. Show how cooking lessons in the smaller schools might possibly be the outcome of the hot-lunch work.

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